FULL TEST: PENTAX K-5 P.71

80+TIPS FOR NATURE PHOTOGRAPHERS

POPULAR PHOTOGRAPHY

AKE GREAT PICTURES

WILD LIFE

Photo Secrets From a Pro

P.58

+

ALL-WEATHER PHOTO GEAR p.65

CALIFORNIA LANDSCAPES p.54

HOW-TO: DRAMATIC SUNSETS p.38

PANASONIC GH2 TESTED p.77

MARCH 2011

972
769
ROCKVILLE MD 20855-1996
DAVID R SMITH
16610 LEOPOLD TER P0006J1
#0895600021474601# 1103 JUN12 0896
#BXBDCGZ **********CRLOT 0064D**C-004

The awards are coming into focus.

It's an honor that *DPReview.com, American Photo, Popular Photography* and *TIME® Magazine's* 50 Best Inventions of 2010 all praised our cameras this year. The αNEX-5, the world's smallest and lightest interchangeable lens digital camera* and the α55, which shoots up to 10 frames per second and full HD video while maintaining continuous auto focus, have no problem letting their stunning images speak for themselves. But, it is nice to have someone else do the talking.

"My verdict: It's the best travel camera I've ever used."

-Jefferson Graham, USA Today, Aug. 18, 2010

american PHOTO EDITOR'S CHOICE 2010

Editor's Choice Award American Photo

αNEX - 5

Best of What's New 2010

Popular Science

2010 Breakthrough Product Award

Popular Mechanics

SONY
make.believe

"It's thrilling to see Sony finding its mojo again, introducing radical new design ideas that, in this case, really advance the state of the art."

-David Pogue, New York Times, Sept. 22, 2010

Camera of the Year Popular Photography

α55

dpreview.com GOLD AWARD

Gold Award

DPReview.com

TIME

50 Best Inventions of 2010

TIME® Magazine

sony.com/alpha

SHARE
YOUR
IMAGINATION
Manfrotto
Imagine More
manfrotto.us

CONTENTS

HOW TO MAKE GREAT PICTURES MARCH 2011 VOLUME 75, NO. 3

Please Recycle This Magazine

FEATURES

54 DESERT SONG
Spring comes early to Southern California—time to capture wildflowers in the desert and storms along the coast. Here's how. *By Jon Cornforth*

58 A WILD WORLD
With a long career photographing the world's wildlife, nature shooter Ingo Arndt shares his tips and advice for great animal shots. *By Peter Kolonia*

65 ALL-WEATHER GEAR
Nature photography means shooting outside in extreme conditions. We've found useful gear for the toughest climates. *By Jeff Wignall*

JON CORNFORTH

INGO ARNDT

CONTENTS

DEPARTMENTS

NEXT

11 WE WANT THIS Fujifilm packed a 15X zoom and lots of extras into its compact FinePix F550 EXR.

12 JUST OUT Epson's new printer, an advanced compact from Olympus, b&w software from Nik, and more.

16 ROUNDUP Five remote flash triggers that will give you more creative control over your pictures.

SHARE

21 PHOTO CHALLENGE A road-trip leads to tunnel vision in our monthly assignment for readers.

22 I, PHOTOGRAPHER Shooting the works in the Art Institute of Chicago.

24 MY PROJECT Camera and pencil team up creatively.

26 LETTERS Your tips and responses to what you've read here.

30 TECH SUPPORT Questions about RAW, compacts, and more.

32 YOUR BEST SHOT Readers draw inspiration from nature.

HOW

37 CREATIVE THINKING Prepare carefully so you can take advantage of nature's lucky breaks.

38 FIX IT FAST Tweak your image gently to liven up a sunset.

40 TIPS & TRICKS Create a starburst effect in backlit scenes.

42 TRAVELING PHOTOGRAPHER Explore caves and caverns around the U.S.

44 LIGHTING Counteract dappled lighting for a compelling outdoor portait.

48 SOFTWARE WORKSHOP Fix subtle problems in your landscapes with these five simple tips.

52 YOU CAN DO IT Swim with gigantic whale sharks and return with amazing underwater photos.

LAB

71 DSLR TEST Pentax K-5 This rugged new 16.3MP flagship packs weathersealing, video, and Pentax's best image quality yet.

77 ILC TEST Panasonic Lumix DMC-GH2 While it's not the smallest ILC, this Panasonic's performance is state-of-the-art.

82 LENS TEST Pentax-DA 35mm f/2.4 AL With excellent optics, Pentax proves that affordable is the new normal.

84 LENS TEST Zeiss Planar T* 50mm f/1.4 Manual focus and metal construction seem old-school? No, perfect for DSLR video.

DON'T MISS . . .

6 EDITOR'S LETTER
8 SHOWCASE
85 THE GUIDE
98 TIME EXPOSURE
112 BACKSTORY

11

32

52

ON THE WEB

THE BUYING GUIDE
Our new interactive feature (PopPhoto.com/buying-guide) brings together our tests, galleries, and editors' ratings for DSLRs, ILCs, compacts, and lenses.

LATEST PHOTO NEWS
Everything you need to know about what's happening in the world of photography.

AMAZING IMAGE GALLERIES
From the Photo of the Day to magazine extras to online exclusives, including how-to—all at PopPhoto.com/galleries.

FREE WEEKLY NEWSLETTER
Sign up at PopPhoto.com/newsletter for the latest highlights, direct to your email inbox.

POPPHOTO.COM

POPULAR PHOTOGRAPHY (ISSN 1542-0337) (USPS 504-890), March 2011, Volume 75, Issue 3, is published monthly by Bonnier Corporation, 2 Park Ave., New York, NY 10016. Periodicals postage paid at New York, NY and additional mailing offices. Authorized periodicals postage by the Post Office Department, Ottawa, Canada, and for payment in cash. POSTMASTER: Send address changes to *Popular Photography*, P.O. Box 420235, Palm Coast, FL 32142-0235; www.PopPhoto.com/cs. If the postal service alerts us that your magazine is undeliverable, we have no further obligation unless we receive a corrected address within one year.
Publications Mail Agreement No. 40052054, Canadian Registration Number 126018209RT0001. Return undeliverable Canadian addresses to: Pitney Bowes, P.O. Box 25542, London, ON N6C 6B2.
SUBSCRIPTION SERVICES: Visit www.PopPhoto.com/cs to manage your account 24/7 or call 1-386-246-0407.

NEWSSTAND COVER: TONY CORDOZA (PENTAX); JOSHUA CRIPPS (VOLCANO); THOMAS P. PESCHAK/SAVE OUR SEAS FOUNDATION (TORTOISE); GAGE YOUNG (PORTRAIT); DENE' MILES (LANDSCAPE); JULIAN COHEN (WHALE SHARK)
SUBSCRIBER COVER: INGO ARNDT. THIS PAGE: DANIEL WHITTEN (SEA BISCUIT); JULIAN COHEN (WHALE SHARK)

FINALLY, CAPTURE YOUR MEMORIES IN 3D. JUST THE WAY YOU LIVED THEM.

With the LUMIX® GH2 camera and interchangeable 3D lens, you'll never look at photos the same way again. Its 3D image processing system adds so much depth and clarity, it feels like you're actually reliving your favorite memories. And viewing is easy. Just connect this camera to a 3D TV, grab some 3D glasses and marvel at your photos in a whole new dimension. After all, life happens in 3D. Shouldn't your photos?

3D LEICA DC LENS MICRO FULL HD iA

panasonic.com/lumix

Panasonic LUMIX

What's in store

Just after the start of the year, my colleagues Philip Ryan, Stan Horaczek, and I made our annual pilgrimage to the International CES, the big consumer electronics show, in Las Vegas. It was a chance to check out some shiny new products—compact cameras, camcorders, displays, bags, printers, portable devices, and a slew of other stuff, much of it without a direct connection to photography. We've covered a few of the items we were most excited about in Next, on page 11, and on PopPhoto.com.

But CES is more than just a vicarious shopping trip, or a fact-finding mission, or a schmooze-fest. It's a chance to look at the world of consumer technology and photography's place within it. And that place is central.

At first it might not seem that way. We didn't discover too many serious tools for serious photographers—except, perhaps, the new 128GB memory cards from Lexar and SanDisk. Mainly we saw consumer-oriented compacts, including still and video cameras that shoot in 3-D.

Yet some important imaging trends emerged:

- **Cameras are everywhere**—and spreading. On the low end of the market, they're getting cheaper and distinguishable more by style than functionality. But the competition also brings more sophistication to higher-end compacts to set each one apart and justify a higher price. This means both more manual control and more built-in image processing. Also more connectivity through GPS and Wi-Fi, and eventually cellular data networks.
- **You'll view digital images everywhere.** The rapid proliferation of color-screen devices, from e-readers and tablets to internet-connected TVs and cars, gives you access to your photos wherever you are, whenever you want them. Many new devices have cameras, too.
- **3-D is getting bigger and better.** This technology still has far to go in overcoming its limitations: viewing glasses, unconvincing depth and dimensionality, costs, and a general feeling of (yes, I'll say it) cheesiness. It's hard to see where the consumer demand is—until you consider gamers, a huge and growing group whose tastes and tech needs are increasingly influential.

Of course, winning technologies are not always the best ones. Success often has more to do with financials, manufacturing, distribution, marketing, consumer expectations, and other business realities.

So where does this leave dedicated photographers like us? With more possibilities than ever.

Miriam Leuchter

NEWSSTAND Pentax's rugged new K-5, tested on page 71, is among the best tools for the worst weather—part of our Nature Photography Special. Photo by Tony Cordoza.

SUBSCRIBER Find out how wildlife pro Ingo Arndt captured this cheetah family, and learn his other secrets, page 58.

POPULAR PHOTOGRAPHY

EDITOR MIRIAM LEUCHTER
ART DIRECTOR Jason Beckstead
SENIOR EDITOR Peter Kolonia
SENIOR EDITOR Dan Richards
SENIOR EDITOR Debbie Grossman
TECHNICAL EDITOR Philip Ryan
TECHNOLOGY MANAGER Julia Silber
ASSISTANT EDITOR Lori Fredrickson
ART/PRODUCTION ASSISTANT Linzee Lichtman
EDITORIAL COORDINATOR Jae Segarra

CONTRIBUTING EDITORS Tim Fitzharris, Russell Hart, Peter Krause, Arthur Morris, Tony Nagatomo, Bryan F. Peterson

POPPHOTO.COM EDITOR Stan Horaczek
ASSISTANT ONLINE EDITOR Dan Bracaglia
IN MEMORIAM Herbert Keppler

BONNIER'S TECHNOLOGY GROUP

EDITORIAL DIRECTOR MARK JANNOT
CREATIVE DIRECTOR SAM SYED
MANAGING EDITOR JILL C. SHOMER

VP, PUBLISHING GREGG R. HANO
GROUP DIRECTOR, SALES & MARKETING Steven B. Grune
ASSOCIATE PUBLISHER Anthony M. Ruotolo (212-779-5481)
ASSOCIATE PUBLISHER, MARKETING Michael Gallic
EXECUTIVE ASSISTANT Christopher Graves
FINANCIAL DIRECTOR Tara Bisciello
CONSUMER MARKETING DIRECTOR Diane G. Potter
NEW YORK ADVERTISING MANAGER Matthew Bondy
NORTHEAST ADVERTISING OFFICE
Shani Ben-Moshe, Scott Constantine, Sara Schiano Flynn, David Ginsberg, Bill Harvey, Phil Mistry
AD ASSISTANT Andrea Licata
MIDWEST MANAGER John Marquardt
AD ASSISTANT Krissy Van Rossum
LOS ANGELES MANAGERS Robert Hoeck, Bob Meth
AD ASSISTANT Kate Gregory
NORTHWEST MANAGER Jay Monaghan
AD ASSISTANT Jessika Aldridge
DETROIT MANAGER Edward A. Bartley
AD ASSISTANT Diane Pahl
SOUTHERN MANAGER Jason A. Albaum
CLASSIFIED ADVERTISING SALES Chip Parham, Patrick Notaro
NATIONAL SALES MANAGER, DIGITAL Chris Young
DIGITAL BUSINESS DEVELOPMENT MANAGER Brian Glaser
DIGITAL PROJECT COORDINATOR Amanda Alimo
INTEGRATED SALES DEVELOPMENT DIRECTOR Alexis Costa
INTEGRATED SALES DEVELOPMENT MANAGERS Michael Kelly, Maria Urso
INTEGRATED SALES DEVELOPMENT PLANNER Lauren Brewer
GROUP DIRECTOR, CREATIVE SERVICES/EVENTS Mike Iadanza
DIRECTOR OF EVENTS Michelle Cast
SPECIAL EVENTS MANAGER Erica Johnson
DIGITAL DAYS DIRECTOR Phil Mistry
MARKETING ART DIRECTORS Shawn Woznicki, Lindsay Krist
PROMOTIONS MANAGER Eshonda Caraway
AD COORDINATOR Irene Reyes Coles
PUBLICITY MANAGER Amanda McNally
HUMAN RESOURCES MANAGER Kim Putman
PRODUCTION MANAGER Betty Dong
GROUP PRODUCTION DIRECTOR Laurel Kurnides
SUBSCRIPTIONS
CUSTOMER SERVICE www.PopPhoto.com/cs
or call 386-246-0407

BONNIER

CHAIRMAN Jonas Bonnier
CHIEF EXECUTIVE OFFICER Terry Snow
CHIEF FINANCIAL OFFICER Randall Koubek
SVP, CORPORATE SALES & MARKETING Mark Wildman
VICE PRESIDENT, CONSUMER MARKETING Bruce Miller
VICE PRESIDENT, PRODUCTION Lisa Earlywine
VICE PRESIDENT, E-MEDIA Bill Allman
VICE PRESIDENT, DIGITAL SALES & MARKETING John Haskin
VICE PRESIDENT, ENTERPRISE SYSTEMS Shawn Larson
VICE PRESIDENT, HUMAN RESOURCES Cathy Hertz
VICE PRESIDENT, CORPORATE COMMUNICATIONS Dean Turcol
VICE PRESIDENT, MEDIA DEVELOPMENT Michael Starobin
BRAND DIRECTOR John Miller
CORPORATE FACILITIES DIRECTOR Debbie Dragone
PUBLISHING CONSULTANT Martin S. Walker
CORPORATE COUNSEL Jeremy Thompson

Jordan, safety is, as always, a vital concern in the Explorer. And safety in the all-new Explorer is all about state-of-the-art advances like the available world's first production inflatable rear seat belts* – a Ford exclusive. There's also available technology that monitors and alerts you to vehicles in front of you and behind you. *Join the conversation at ford.com/2011explorer.*

THE ALL-NEW **EXPLORER**

Ford

Drive one.

*Available early 2011
2nd row outboard only.

BELLO BOKEH Technical Editor Philip Ryan found this statue in the Venetian Resort Hotel/Casino in Las Vegas, NV. Despite the dim light, he shot handheld with the Zeiss Planar T* 50mm f/1.4 lens mounted on the Canon EOS 5D Mark II. With the camera set to ISO 6400, and the lens stopped down to f/2 to show off its incredible *bokeh*, he used a shutter speed of 1/250 sec. For our full test of the Zeiss Planar T* 50mm f/1.4, see page 84.

PHILIP RYAN

MPIX ROCKS!

I recommend Mpix because their print quality is second to none. Their color and gentle tonal range are consistent from prints to press products. Add in fast shipping and outstanding customer service, how can you go wrong?

SHELLEY PAULSON
Equine, Wedding & Portrait Photographer
Twin Cities, Minnesota
www.mpix.com/ShelleyPaulson

SHELLEY'S FAVORITES

GALLERY WRAPS

"Rather than buying generic equine-themed art at a store, my clients love to make my photos of their horses into art for their walls. Gallery Wraps are an easy and simple solution for displaying photos at a large size."

BOUTIQUE PACKAGING

"I appreciate having the option to drop-ship high quality prints directly to my clients. Boutique Packaging allows me to present my work in a professional manner and saves me time."

Mpix

Shoot Today. Upload Tonight. We Ship Tomorrow.

NEXT

THE HOTTEST NEW STUFF AND THE TECHNOLOGY TRENDS BEHIND IT

EPSON'S NEW PRINTER HITS A SWEET SPOT 12

VIDEO CAMCORDER WITH A BETTER SENSOR 14

ROUNDUP: FIVE REMOTE FLASH TRIGGERS 16

WE WANT THIS

FUJIFILM'S TRAVELER

This compact has a nice zoom, GPS, and sophisticated controls

WHEN YOU'RE on the road, you might do well to have the new Fujifilm FinePix F550 EXR along. This 15X superzoom's built-in GPS geotagger has a Photo Navigation mode to help you find your way back to any spot you've photographed. Just bring up the picture and the camera will tell you the distance—and direction—to that spot.

Along the way, you can take high-resolution shots with the camera's 16-megapixel EXR CMOS sensor. This uses paired pixels, so that you can step the resolution down to 8MP for high-dynamic-range photos, or for low-light shots with reduced noise. It also shoots 1920x1080i HD video at 30 fps.

The camera employs sensor shift to stabilize images, a good thing since there's no optical finder. The F550 EXR is expected in stores by mid-March.

FUJIFILM FINEPIX F550 EXR

16MP
24–360mm equivalent f/3.5–5.3 lens
3-inch, 460,000-dot LCD
$350, est. street
www.fujifilm.com

JUST RIGHT

A high-end printer in a midrange package

EPSON'S LATEST printer is perfect for photographers who print frequently and want high quality, but may not have the need, space, or budget for a wide-format printer. Situated in the lineup between Epson's 13-inch Stylus Photo R2880 and the 17-inch Stylus Pro 3880, the new 13-inch Stylus Photo R3000 hits a sweet spot.

Not only does the R3000 have much larger ink cartridges than the R2880, it also has Epson's *UltraChrome K3* with Vivid Magenta inks, and the AccuPhoto HD2 Image Technology. That tech was previously available only in the 3880, and promises smoother transitions and less posterization. We loved the 3880's prints, so we have high hopes for this model.

More bonuses: There's a tray for printing directly onto CDs and DVDs, and a roll attachment for printing on roll paper. Photo-black and matte-black inks switch without the need to change cartridges. And the printer is Wi-Fi and ethernet capable, so it should be easy to share.

Epson Stylus Photo R3000
$850, street
www.epson.com

COURTESY OF EPSON AMERICA, INC. (PRINTER); DELTOROPHOTOGRAPHY/FOTOLIA.COM (PRINT)

NEWS FEED

> Samsung's subtly updated NX11 ILC comes with its new 18–55mm i-Function lens, which lets you adjust settings, old-school style, by twisting a control ring on the lens.

> No instant camera? You can still get instant prints: Polaroid's new GL10 mobile printer uses heat-activated ZINK for quick 3x4-inchers.

PRIMO COMPACT

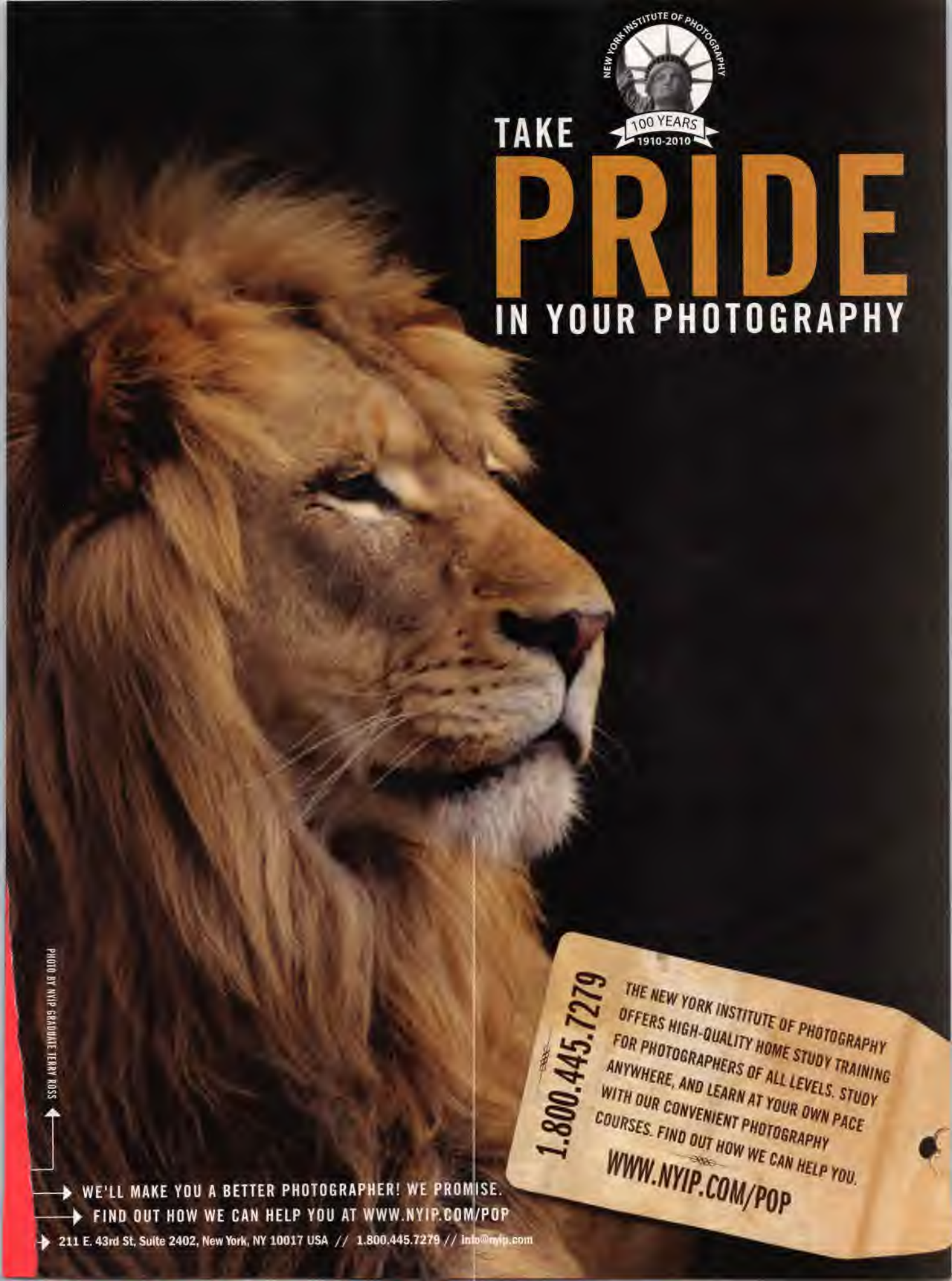
Sharp glass, cool controls

IF YOU REMEMBER Olympus's legendary XA compact film camera, then you'll know to expect good things from its new 10MP XZ-1. A fast 28–112mm (equivalent) f/1.8–2.5 lens feeds light to a large 1/1.63-inch CCD sensor that reaches ISO 6400. You can shoot in RAW (12-bit), JPEG, or both, and frame on the 3-inch 614,000-dot OLED screen. A ring around the lens lets you control aperture the old-fashioned way, while a click wheel on the back controls shutter speed in manual mode.

Olympus XZ-1
$500, street
www.olympusamerica.com

INSIDE TECH

The XZ-1 has Olympus's first iZuiko Digital lens, and combines 11 pieces of glass—among them extra-low-dispersion aspherical, super-high-refractive index, dual super-aspherical, and cemented doublet elements—to help control aberrations and maintain sharpness on par with its Zuiko Digital lenses for DSLRs.


NEW YORK INSTITUTE OF PHOTOGRAPHY
100 YEARS
1910-2010
TAKE
PRIDE
IN YOUR PHOTOGRAPHY
1.800.445.7279
THE NEW YORK INSTITUTE OF PHOTOGRAPHY OFFERS HIGH-QUALITY HOME STUDY TRAINING FOR PHOTOGRAPHERS OF ALL LEVELS. STUDY ANYWHERE, AND LEARN AT YOUR OWN PACE WITH OUR CONVENIENT PHOTOGRAPHY COURSES. FIND OUT HOW WE CAN HELP YOU.
WWW.NYIP.COM/POP
PHOTO BY NYIP GRADUATE TERRY ROSS
WE'LL MAKE YOU A BETTER PHOTOGRAPHER! WE PROMISE.
FIND OUT HOW WE CAN HELP YOU AT WWW.NYIP.COM/POP
211 E. 43rd St, Suite 2402, New York, NY 10017 USA // 1.800.445.7279 // info@nyip.com

HOT HD

Canon's lower-megapixel answer to better HD video

WHILE SOME manufacturers have been busy making camcorders that will shoot 3D footage, Canon has turned its focus to improving performance in its regular high-definition camcorders. Taking a cue from its advanced compact still cameras, Canon reduced the pixel count to 1920x1080 in the sensor of its new Vixia HF G10 to improve low-light shots. With fewer, yet bigger, pixels, the company says it has increased sensitivity by 25 percent and greatly increased dynamic range over its 2010 models.

This new high-end camcorder also boasts an optically stabilized 10X 30.4–305.35mm f/1.8–2.8 lens, 3.5-inch 922,000-dot touch-screen, 32GB of built-in flash memory, two SD card slots for additional storage, plus a slew of other helpful features.

Canon Vixia HF G10 Video Camera **$1,500, street** **www.canonusa.com**

MOVIE METER

A lightmeter for HD video, too

HIGH-QUALITY HD video is in more and more still cameras, and to help budding DSLR cinematographers with lighting and exposure control, Sekonic has introduced the L-308DC DigiCineMate. This new meter, an update of the L-308S Flashmate, features three display modes: HD Cine for DSLR video; Cine for digital camcorders (including lux and foot-candle readouts); and Photo, with full a range of still-photo settings including ambient, flash (cord and cordless) and EV readouts. Exposure measures are accurate to within 1/10-stop to ensure consistency between scenes.

Sekonic L-308DC DigiCineMate
$280, estimated street
www.sekonic.com

ILJA MASIK (WWW.IMASIK.CZ)/FOTOLIA.COM (LCD IMAGE)

NEWS FEED

>Nature photographers often go out of bounds of cellphone service. In case you need to be rescued, get TerreStar's new GENUS phone, which runs on both satellite and cell networks.

>Casio's Tryx HD pocket cam has a unique twist. It morphs from vertical (pocket-video style) to camcorder-like (with the LCD flipped out) to a traditional horizontal for shooting stills.

>First it moved to fall from winter—now photography's big annual trade show has been renamed. This year, look for our reports from CliQ 2011, rather than from what was once PMA.

New Software

Nik Silver Efex Pro 2

We've never been happy with the black-and-whites Photoshop makes, so we rely on plug-ins for b&w conversion. One of the best is Nik's Silver Efex, which has now been upgraded to version 2.0 ($200, www.niksoftware.com), promising even more power and precision than before. Chief among its improvements is the addition of sliders to make global changes quickly to highlights, midtones, and shadows. The plug-in works with Adobe Photoshop, Lightroom, and Apple Aperture.

THE LOWDOWN

THE LATEST IN 3D TECH

3D was huge at this year's CES show, and though we've been skeptics about its staying power, recent innovations have us warming to it. We saw a few glasses-free displays, including an impressive one from Sony. Dual-lens, dual sensor camcorders make it easier to create quality content. And Olympus has a great method for shooting 3D stills with single-lens compacts.

POPULAR PHOTOGRAPHY
presents

SONY
make.believe

digitaldays
Photography & Video Workshops

Experiences

Jim Grasley
Occupation: Industrial photographer, educator
Workshop: Seattle, WA

Seattle native Jim Grasley is a professional industrial photographer who specializes in shooting granite, tile, marble, architectural glass, custom cabinetry, and upscale homes, but he's also an eclectic photo enthusiast who ventures forth in the U.S. and abroad to capture impressive images of birds, wildlife, waterfalls, the village life of indigenous people, and imposing landscapes of Mount Rainier taken from his home on Puget Sound. To keep up on the latest hardware and software, to learn new techniques, and to enhance his shooting experience, Jim consistently attends Digital Days workshops.

"Here's the best part: When it comes to bang for the buck, you just can't beat it!"

"My first Digital Days in 2007 in Seattle was fabulous," exults Jim. "I took away a tremendous amount of information and was able to upgrade my digital slide shows immediately. The live models shoot is outstanding—the lighting is perfect and the models are terrific. You can shoot as many pictures as you want of the different setups while getting great tips about camera settings and angles from friendly, forthcoming instructors. I attended the 2008 Digital Days in Bellevue, Washington, and I've just signed up for the 2011 event in Seattle on February 27th. Am I looking forward to it? Heck yeah! There's simply no better way of refreshing and tuning up your shooting skills, all while having fun. Here's the best part: When it comes to bang for the buck, you just can't beat it!"

WIRELESS FLASH

WIRELESS FLASH triggers and their accessories help you fire your flashes or strobes from your camera without the use of connecting cords. That means a cleaner work environment, simpler setup, and more freedom of movement. The most sophisticated (and priciest) give you the most control. Here are five we like, from complex to simple.

$80 PocketWizard AC3 ZoneController

Canon and Nikon shooters using PocketWizard's MiniTT1 or FlexTT5 triggers can slide on this accessory and remotely control light levels for three or more Canon or Nikon TTL flashes, manually or automatically, using the AC3's dials.

$177 Elinchrom Skyport Universal SPEED set

Elinchrom's original EL-Skyport transmitters and receivers were popular for their price and high level of control, but the latest versions have a much more robust build, including a locking collar that will make sure the transmitter doesn't slip out of your hot-shoe. A bonus: users of Elinchrom's RX-series strobes can even control strobe power from the camera.

$90 Hähnel Combi TF

Available for Canon, Nikon, Olympus, and Panasonic, this trigger does double duty: It works both as a remote shutter release and as a flash trigger. As a shutter release, it can wirelessly control autofocus, continuous shooting, bulb mode, and trigger delay. And as a trigger, it can fire multiple flashes and studio lights.

$48 Dot Line Corporation RS-RT03K

This simple, 4-channel trigger will fire flashes from your camera's hot-shoe or PC outlet. Its special feature? The receiver has a hole for your strobe's umbrella, making it easy to add to your system.

$30 Flashpoint Infrared Remote Trigger

The most basic kind of trigger is the one that simply makes your flash pop. Within a 30-foot range, this starter trigger from Adorama will fire as many flashes as you have that work with a built-in or attached slave.

NEWS FEED

>Kubota's RPG SpeedKeys, the external wireless keyboard that makes using Kubota's Lightroom presets far faster, is now available in version 2.0.

>Sony's not the only company with dedicated 3D camcorders. Now JVC has introduced the GS-TD1, which uses two lenses and two 3.32MP sensors to capture full HD video in 3D.

>Early adopters using NVIDIA 3D Display Drivers on their PCs may not have much to view, so NVIDIA launched 3dvisionlive.com, a site to watch and share 3D photos and videos.

>The biggest memory cards just doubled in size: SanDisk introduced a 128GB CF card, and Lexar presented the same capacity in SDXC form.

>A viewfinder on a low-cost compact? This blast from the past is on Canon's new 12.1MP PowerShot A1200.

TOOLBOX

BACKUP

Protect your data when you're on the road

YOU NEED to back up essential files on your notebook, but who wants to lug around a portable hard drive all the time? Enter Lexar's Echo MX backup drive (8GB to 128GB, $45 to $500, street; www.lexar.com). With its built-in capacity meter, it looks like a souped-up thumb drive, but it's much more sophisticated. It contains software that allows you to choose your crucial data and have it continuously and automatically backed up, even when you're still working on files. It activates as soon as you plug it in—archiving is that simple. It works on both Macs and PCs. And files are automatically protected with 128-bit AES encryption, so your data will be secure even if you lose the drive.

94%

of U.S. shooters take pictures to preserve memories.

9%

do it to master skills.

SOURCE: PMAI

YOU LOOK DOWN INTO ICY WATERS.

IGNORE YOUR SHAKING LEGS.

DROP INTO PURE DARKNESS.

WONDER HOW FROZEN FINGERS CAN STILL WORK.

RACE AGAINST TIME. AND HYPOTHERMIA.

AND AN 1100-LB PREDATOR.

JUST TO GET ONE SHOT.

FINISH STRONG.

Epson Stylus Pro 4880 – $1,995*

Epson Stylus Pro 3880 – $1,295*

Epson Stylus® Photo R2880 – $799.99*

- *Exhibition-quality prints from 13" to 17" wide*
- *Epson UltraChrome K3® with Vivid Magenta, used by the world's leading photographers for stunning black-and-white and brilliant reds, blues and purples*
- *MicroPiezo® print head technology for exceptionally precise ink droplet placement*
- *World-class service from a dedicated support team*

EPSON.COM/FINISHSTRONG

EPSON ULTRACHROME K3 VIVID MAGENTA

EPSON®
EXCEED YOUR VISION

MONTANA
& YELLOWSTONE NATIONAL PARK

SEPTEMBER 6–11, 2011

REGISTER AT WWW.MENTORSERIES.COM

For more information, call toll-free 888-676-6468.

MENTOR SERIES
Worldwide Photo Treks

It's time to let your lens roam free in Montana, a state brimming with vast landscapes, majestic wildlife and history-rich towns—all of which you'll encounter firsthand on this memorable Mentor Series trek. At your side throughout the journey will be Nikon professional photographers Reed Hoffmann, John Reddy and Lucas Gilman, all prepared to share their tips and techniques on how you can bring your photography prowess to the next level.

With its stunning vistas, extraordinary geothermal features and plentiful wildlife, Yellowstone National Park is nothing short of a photographer's dream. Keep your camera at the ready as we travel its varied landscapes: lakes, canyons, rivers, mountain ranges, and more. At Upper Geyser Basin, encounter the world-famous Old Faithful, a cone geyser that spews boiling water to great heights several times a day, creating a spectacle you'll be eager to capture. At nearby Old Faithful Inn, try your hand at some architectural and interior studies—this largest log hotel in the world represents the Golden Age of the rustic-resort style.

Traveling on to Midway and Lower Geyser Basins, fill your frame with even more fantastic displays of nature, including the expansive Grand Prismatic Spring, the kaleidoscope of color at Black Sand Basin and the bubbling cauldrons of mud known as the Fountain Paint Pots. Our trek through Yellowstone continues as we reach the Grand Canyon of the Yellowstone, a breathtaking portrait of the erosion of hundreds of thousands of years. Be inspired by this canyon as countless photographers have been before you, meanwhile letting our mentors help you create images you can truly call your own.

To capture the roots of this remarkable region, point your lens no farther than Virginia City and Nevada City, ghost towns that play host to a civilization straight out of the past. Take your pick of the many unique photo ops, including models in period piece costumes and historic buildings showcasing authentic artifacts and furnishings from these 1860s gold-mining communities.

It's a bright and early photo shoot at Elkhorn Ranch, a traditional dude ranch in the Montana Rockies. Here you'll have even more chances to compose images with a strong setting: gorgeous mountainscapes, ranch still lifes, cowboys and cowgirls.

Don't miss out on this adventurous trek to "Big Sky Country," where the opportunities to enrich your portfolio are as limitless as the Montana horizon. Sign up today!

All photos © Donnie Sexton

SCHEDULED TO APPEAR
Limited to 15 Students per Instructor

REED HOFFMANN
USA Today
Blue Pixel Inc.

LUCAS GILMAN
New York Times
Outside magazine

JOHN REDDY
Smithsonian
Men's Journal

Workshop fee: **$1,499***

*includes 5 breakfasts, 4 lunches, 2 dinners, snacks and water on the bus, transportation to each shooting location, park permit fees, park entrance fees, in-the-field instruction, presentations, digital review sessions and an Mpix photo book.

With additional support from:

Mpix Manfrotto SanDisk MONTANA

Special thanks to our premier sponsor:

Come to Montana and try out some of the latest equipment that **Nikon** offers including their high-performance digital SLRs, NIKKOR lenses and a variety of Coolpix compact digital cameras. You'll capture Montana as never before!

At the heart of the image... Nikon

SUNBOUNCE and SUN-SNIPER – the perfect team for professional photographers!

„THE PRO"
STEEL WIRE & BEARING

„THE TPH"
– TRIPLE PRESS HARNESS –
STEEL WIRE & BEARING

SUN-SNIPER „DPH" – DOUBLE PLUS HARNESS – STEEL & BEAR and
SUN-BOUNCE MICRO-MINI with FLASH-BRACKET

STAINLESS BEARING CAMERA CONNECTOR

The most complete HIGH-TECH SNIPER CAMERA STRAP SYSTEM. Attached with the genuine STAINLESS STEEL BEARING DIRECT COUPLER for less swinging and better spinning.

Distributed by: BRONIMAGING GROUP U.S.
www.bronimaging.com

SUN SNIPER
www.sun-sniper.com

SUNBOUNCE.COM

SHARE

CONVERSATION, INSPIRATION, CONTESTS, AND YOUR QUESTIONS ANSWERED

PHOTOGRAPHING FINE ART

22

CAMERA AND PENCIL TEAM UP

24

MONTHLY OPEN PHOTO CONTEST

32

PHOTO CHALLENGE

FAST WORK

This challenge winner is poetry in motion

OUR DECEMBER Photo Challenge, to photograph from a moving vehicle, was certainly not the easiest assignment—it takes intuition to know a great photo op as it's flying by, and it takes skill to capture it in seconds. But 29-year-old John Harke of San Diego had both.

On a road trip with a friend from Ohio to Washington, DC, the database developer kept his Canon EOS Rebel XSi in his lap in the passenger seat. But traveling at midday, in harsh lighting, "I wasn't finding any shots," Harke says, "so I'd turned my camera off, waiting for city landmarks."

When the car first turned into the Fort Pitt Tunnel towards Pittsburgh, Harke knew he had the potential for a fantastic shot.

Quickly swapping his lens for a Tamron wide-angle, he placed the camera in shutter-priority mode, wrapped the strap around his wrist, and positioned the lens barrel into the crack between the car window pillar and side mirror. Using his 2-sec timer, he exposed first at 1/2 sec and then at 1/3 sec.

He got five shots in before the tunnel ended. One, after a bit of tweaking in OnOne PhotoTools, is this winner. —Lori Fredrickson

JOHN HARKE

NEXT PHOTO CHALLENGE

This month, two photographers coped with backlit subjects (pages 37 and 40). Send us your backlit best by March 31, and you may get $100 and your photo here. See PopPhoto.com/PhotoChallenge for the rules.

Museum Collector

Documenting the Art Institute of Chicago

Robert Hasimoto, 58, is a senior photographer at the Art Institute of Chicago. To see a gallery of his photos, visit PopPhoto.com.

What does your job entail?
Photographing paintings and three-dimensional objects in the museum's collection. In the studio, we have an easel set up for paintings of every type and size, and other two-dimensional work. The three-dimensional objects range from tiny, ancient artifacts to large sculptures and pieces of furniture.

You've shot everything there?
Yes. Every major piece needs to be photographed, not just for archival purposes, but for publications.

What's the process? We get requests for some pieces, and we have ongoing exhibitions and publication schedules, which are done as projects—I'm working on Russian posters now. It's unusual for me to spend more than 15 minutes setting up an object, but I spend a lot of time in Photoshop. I'll clean up the background, adjust the perspective.

So it's like a commercial studio?
In many ways, but we have to be much more sensitive to the objects—we aren't looking to enhance them. With a painting, it has to be a very accurate reproduction of the colors and textures.

What gear do you use? For the painting easel I use bare bulbs—reflectors throw a pattern that varies in color and in level along the edges. And bare bulbs bring out the the texture. If there are problems with spectral highlights, I can deal with it in Photoshop. For three-dimensional objects, I mainly use reflectors behind big diffusers, but also softboxes. I use a Phase One body primarily for three-dimensional objects; we also have a Sinar p3 view camera for paintings or for perspective control. And we have Canon DSLRs for smaller-format work, but more for publicity and portraiture.

How many of you work there?
There is another studio photographer who does all works on paper—photographs, prints, and drawings—and two others who do publicity, events, and portraiture.

What are the challenges? These come from objects that are difficult to photograph because of their material or their subtlety of technique. Sometimes the challenges are more in reproducing the exact colors in a painting—blues are difficult to reproduce digitally.

How did you start out? I worked in camera stores and photo labs around Chicago while I was growing up, and met a food photographer who hired me as his assistant—I learned studio lighting from him. After a few years, I decided to focus on fine-art photography and went back to school at the Art Institute, which then turned into a part-time job, then a full-time job, and now a lifetime career. I've been here for 26 years.

What's your favorite piece?
I don't think I could pick one. I'm one of probably less than 10 percent of the staff who can actually handle objects in the museum, and I've handled every type of piece we have, so I've learned to appreciate art objects of every kind. One of the best things about working here is being so close to such a major art collection—it's the second largest in the country, and we have the finest examples of every type of artwork imaginable. Almost daily, something will come into the studio that's amazing. *—Interview by Kathleen Davis*

NANCY BEHAL

SIGMA LENS for DIGITAL
NEW RELEASE

8-16mm F4.5-5.6 DC HSM

Lens Case supplied

The world's first ultra wide zoom lens covers focal lengths from 8mm, designed specifically for digital cameras.

The world's first ultra wide zoom lens with a minimum focal length of 8mm, designed specifically for digital cameras with an APS-C size image sensor. Four FLD glass elements and three aspherical lenses provide high quality images. This ultra wide angle lens has the widest angle of view and an exaggerated perspective to produce striking images.

SIGMA CORPORATION OF AMERICA 15 Fleetwood Ct., Ronkonkoma, NY 11779 | Tel : 1-631-585-1144 | www.sigmaphoto.com

USA 3 Year Service Protection

Drawing on Creativity

A pencil and camera project

WHEN IT comes to being creative with photography, sometimes the best tools are the most basic—as Ben Heine's series, "Pencil Vs. Camera," suggests. "I've been drawing and photographing for several years now, and I've always been interested in mixing mediums," he says. "One day it occurred to me to oppose imagination and reality, by using just pencils and my camera."

The graphic artist's first experiment was in the terrace of a countryside home in Belgium. Standing on the terrace, he drew a quick sketch of a nearby table and chairs, held the drawing up, positioned it to fit the landscape, and snapped. From then on, whenever he passed an interesting landscape or location, he'd imagine something interesting to put in the frame—the Little Prince looking down from a cloud, Nintendo's Mario character hopping out of a pipe on a city street.

He uses his Samsung NX10 with different lenses. The hard part is to make sure the drawing is positioned correctly at the appropriate distance, and to hold it steady as he shoots with the other hand. Generally he'll readjust contrast and adjust perspective slightly in Adobe Photoshop so that the lines match exactly, but when his shot doesn't quite work out, he'll composite separate images of his drawing and landscape. Sometimes he'll shoot and print a photo without the drawing, then draw at home, and photograph his photo and drawing in a single frame.

Graphic artist Ben Heine, 27, lives in Brussels. See more at www.benheine.com.

Best, Heine says, is exercising his creativity on location: He's particularly proud of a few images he made at an abandoned campsite in the woods. He drew a sketch of a tiny arsonist, then set fire to the drawing.

"My first idea of it was as a sort of battlefield between two techniques," he says, "but I now think of it more as a peaceful combination of mediums." —*Lori Fredrickson*

BEN HEINE (4)

Priority Mail® Flat Rate Envelopes. One rate to any state.

Priority Mail Flat Rate Envelopes, only from the Postal Service.™

Now available in various sizes. Just fill it* and ship it to any state for just $4.95.

Order your free Flat Rate Shipping Kit† at prioritymail.com/kit35

Priority Mail® Flat Rate
A simpler way to ship.

UNITED STATES POSTAL SERVICE®

* For mailable items up to 70 lbs. Visit usps.com® for details.
† Offer ends 4/30/11 and is only available while supplies last. Offer valid for one customer per address.
Privacy Notice: For information regarding our privacy policies, visit usps.com/privacypolicy
©2011 United States Postal Service.® All Rights Reserved.
The Eagle Logo, the Letter Carrier Uniform, and the trade dress of USPS® Packaging are among the many trademarks of the U.S. Postal Service.®

HOYA

HRT

CIR-PL UV FILTER

High-Rate Transparency Film

This filter uses a newly developed High-Rate Transparency film that passes more visible light through the filter while still filtering the same amount of polarized light. The HOYA HRT CIR-PL UV filter transmits as much as 25% more light through the polarizing film giving the photographer about 1/3 stop more light than a standard circular polarizer.

HOYA is a registered trademark of Hoya Corporation.

EXCLUSIVE DISTRIBUTION BY:

THK PHOTO PRODUCTS, INC.

Tokina · HOYA · Kenko · SLIK

7642 Woodwind Drive, Huntington Beach, CA 92647

Visit our website for more information at

www.thkphoto.com

BOB HILLS

Snow Shoot

Loved the advice in "Winter White" (January 2011), but there are some simple extras that can make your outdoor nature shooting more enjoyable. I made a small investment in snowshoes, and they've made a world of difference: They allow me to more easily navigate through fresh show, make me more stable, allow me to trek to and across areas that others cannot, and add a new adventurist dynamic. Also, it's fun to do self-portraits of your adventures.

If you are in the city and lack open space for snow-fallen landscape shots, most city golf courses double as cross-country ski trails and provide gorgeous photographic opportunities and some much-needed "alone in nature" time.

And don't forgot to get some cold-weather shooting gloves. I got a pair from Lowepro and they work great, allowing you to make all those adjustments to your camera.

Peter Castro
Madison, WI

THANKS FOR your explanation in the January issue regarding aspect ratios (Tech Support). Certainly 90 percent of cameras must have a 3:2 ratio. I wonder why photo-paper producers don't have papers with the same aspect ratios. 4x6 fits, but 8x10 does not, nor does 5x7 or 8.5x11 or 11x17 or 13x19. The same question can be asked of producers of commercial premade and matted frames. Life would be simpler if they all followed the 3:2 format. ***Bob Maher***
Palm Desert, CA

HOW TO describe Mark Rosenbaum's photo of the mother and

Tokina

ULTIMATE WIDE ANGLE ZOOMS

DX
APS-C Format DSLR

or

FX
35mm Full Size DSLR

AF11-16mm f/2.8
AT-X 116 PRO DX

ALL NEW
AF16-28mm f/2.8
AT-X 16-28 PRO FX

AF10-17mm f/3.5-4.5
AT-X 107 DX Fisheye

AF12-24mm f/4
AT-X 124 PRO DX II

AF16-50mm f/2.8
AT-X 165 PRO DX

AF16.5-135mm f/3.5-5.6
AT-X 16.5-135mm DX

AF80-400mm f/4.5-5.6
AT-X 840 D

AF35mm f/2.8 Macro
AT-X M35 PRO DX

AF100mm f/2.8 Macro
AT-X 100 AF PRO D

EXCLUSIVE DISTRIBUTION BY:

THK PHOTO PRODUCTS, INC. | 7642 Woodwind Drive, Huntington Beach, CA 92647
Tokina • HOYA • Kenko • **SLIK** | Visit our website at **www.thkphoto.com**

young giraffe in the December 2010 Your Best Shot—moving, poignant, inspiring? All of those things. That kind of shot is the reason I spend so much time "out there" with nature. Great photo!

Robert Orgeman
Rhinelander, WI

I'M NOT in the habit of writing letters of complaint. But as a result of "Street Scene" (Photo Challenge, January 2011), I had to make an exception. The photo was of a Bangkok woman, and the article mentioned how, when she noticed she was being photographed, she "jumped up and screamed" because she wished not to be photographed. Later, the photographer slyly recomposed, took three shots, and "the vendor never noticed."

Something similar happened to me on the coast of South Carolina last year. I decided to take incognito photos of street vendors. However, another vendor nicely expressed to me that they do not appreciate that sort of thing. I apologized to the woman I was photographing. She was visibly upset. We ended up having a very enlightening two-hour conversation. She said that if I had just asked, she would have allowed me to take the picture.

We can debate for hours the legality and ethics of taking photos in public and not having to ask permission. And the subject of the free press and editorial usage. And how captured images become "our property." But my experience that day taught me to at least consider respecting people for what they are, people. It reminded me to protect my subjects' dignity. I found it highly offensive for the photographer and the editors of your fine periodical to exploit this lady in that manner and invade her personal space.

Dave Turman
Hodges, SC

POPULAR PHOTOGRAPHY

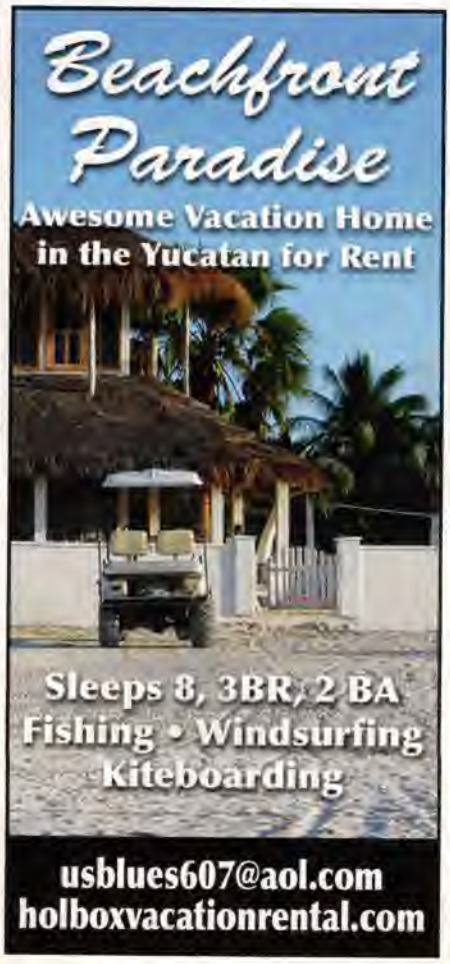
HOW TO CONTACT US
Address your questions or comments on editorial content to Popular Photography, 2 Park Avenue, New York, NY 10016; e-mail, PopPhoto@bonniercorp.com. Published letters may be edited for length and clarity. We regret that we cannot answer all letters. Editorial contributions sent by mail must include return postage and will be handled with reasonable care; however, we assume no responsibility for return or safety of photographs, disks, or manuscripts.

SUBSCRIPTIONS
Phone 386-246-0407 or visit PopPhoto.com/cs for all subscription inquiries. Please allow at least 8 weeks for a change of address; include both your old and new addresses, and if possible an address label from a recent issue. Subscription prices: U.S.: 1 year, $14; 2 years, $28; 3 years, $42. Canada (includes 5% GST) and all other foreign: 1 year, $31.93; 2 years, $55.94; 3 years, $77.94. Occasionally we share our information with other reputable companies whose products and services might interest you. If you prefer not to participate, please contact us at 386-246-0407 or PopPhoto.com/cs.

REPRINTS AND EPRINTS
Please contact Brian Kolb at Wright's Media, 877-652-5295, bkolb@wrightsmedia.com.

PEFC
PEFC/29-31-58

The paper used for this magazine comes from certified forests that are managed in a sustainable way to meet the social, economic and environmental needs of present and future generations.



INTERFIT

Expanding your Creativity

Seculine

Wireless Flash Trigger

TWINLINK

The T2D Transmitter and Receiver kit is supplied with everything you need to wirelessly fire your camera flash or studio flash equipment.

16 channel display with a range of up to 150ft indoors and up to 600ft outdoors making it a hugely versatile system, especially when using multiple receivers and flash heads to light large areas.

Super Cool - Lite G55

1300 watts of power energy efficient with long life lamps 5500 k White Balance. Softbox and high contrast reflectors included

Full controllability
at the touch of a button

EX300

The 2 head kit has the components of a full studio with 2 x heads, 2 x lighting stands, 1 x translucent umbrella and a 24" softbox with all required lamps and cables. In addition an all in one kit bag is included in the kit.

EXD400

The Interfit New EXD400 combines all the features of the multiple award wining EX150 MKII with fan cooling and a larger polycarbonate body. Easy to use controls make the EXD400 desirable. Each head features, user changeable flash tubes, fan cooling and Infrared sensitive light sensors.

Strobies

it's what your hotshoe flash has been waiting for

A range of Accessories for your flashgun

NEW 3 Way Bracket with umbrella holder

See the STROBIES full range on the Interfit Website

Interfit Photographic Ltd
420 Industrial court West
Villa Rica,GA 30180
Tel :(toll Free) 1-866-947-9796

Want to know more about any of the products above? Log on to

www.interfitphotographic.com

Raw Subject

Q Your December 2010 Software Workshop about shooting in RAW convinced me to start using that format. Then your review of Adobe Photoshop Elements 9 convinced me that I should upgrade to this new version (from Elements 5). But in the review you said that if you plan on shooting RAW, Adobe Lightroom is a better purchase. At nearly $300, Lightroom is a little expensive, and Elements is much more friendly to my modest budget. So, which is better for growing as a photographer? ***Adam DeClercq, Anaheim, CA***

A *Start out in RAW at no cost. Cameras that can shoot RAW almost always come with the manufacturer's conversion software, which also provides a convenient way to do minor adjustments to exposure, contrast, and color balance. You can save the images in the high-information TIFF format and import them into Elements 5 for more editing. If you find you're doing a lot of retouching, it will be worth your while to upgrade to Elements 9. And if eventually you shoot exclusively in RAW, it will be time to buy Lightroom. Both programs, by the way, offer free trials.*

Q ANOTHER RAW SUBJECT
I shoot with a Nikon D70s and a Canon PowerShot S95, and I use Elements 8, Lightroom 1, Photoshop CS4, and Canon Digital Photo Professional to edit. I shoot only RAW, but no single program will recognize both RAW formats, causing me to jump from one program to the other. Would I be better off converting the Canon CR2 and Nikon NEF files to TIFF immediately after importing photos? ***Russell Risk, Gulf Breeze, FL***

A *You have the classic problem: new camera, old software. For $99 you can upgrade to Lightroom 3. The newer version has better RAW processing, will handle images from both cameras, and will allow you to import your converted shots straight into either Elements 8 or Photoshop CS4. Want a free solution? Download the latest version of Adobe's DNG converter, and convert your S95 shots to the universal DNG format. They'll still be RAW, and you can process them in any of your present image editors.*

NEW Evolution Series
3 ways to Carry
Holds a Laptop
3 ways to Access
Sling Pack on Right Shoulder
Left Side Access
Backpack on Both Shoulders
Right Side Access
Evolution 8 model 5788
Sling Pack on Left Shoulder
Front Access
Tamrac's new Evolution Series backpacks provide an unprecedented level of versatility. With their unique harness system, the Evolution Series backpacks can be carried three ways while Tamrac's Triple Access System™ provides three ways to access your gear. In addition to a DSLR with a lens attached, the Evolution 8 also carries a laptop, tripod, and other accessories and personal items.
For a FREE 80 page Color Catalog, call toll-free 1-800-662-0717
See the VIDEO online www.tamrac.com
tamrac®
PHOTO, LUGGAGE & COMPUTER CASES

What Should I Buy?

We've received a number of letters from DSLR-loving readers who appreciate the bring-'em-anywhere convenience of pocketable compact digicams. Their big gripe? The inability to mount filters on those unthreaded, retractable lenses. Here's a solution: The Cokin Magnetic Filter-Holder ($17, street) can be attached to the camera via an included self-adhesive metal ring and can accept any Cokin A-series filter, including a circular polarizer. The rings come in two sizes, small and medium, to fit many pocket cameras.

Q BURST A BUST?

Could you explain why burst rate matters? I was taught (on a film camera) to anticipate the peak of the action. It takes practice, familiarity with the subject, and planning, but is not difficult. Burst shooting seems to be nothing more than blasting away and hoping that something good will happen—and the odds are not favorable. With a shutter speed of 1/500 sec and a burst rate of 10 frames per second, the chances of capturing the peak of the action are 1 in 50. As few cameras can shoot 10 frames per second, the odds are typically worse. Burst rate seems to me a useless statistic, substituting numbers for substance.

Paul Wille
Phoenix, AZ

A *We agree wholeheartedly that photographers should learn to time their trigger fingers, but a fast burst rate can be a real assist for action shots. And while your math is impeccable, it's misleading—many "peaks" occur in a slice of time longer than 1/500 sec. With very fast motion (race cars, for instance) a photographer can pan with the motion and effectively enlarge the time window.*

What constitutes the peak, anyway? It's not hard to anticipate a slide tackle in soccer, but the resulting tumble is so unpredictable that you can't know when best to press the shutter. Then there are plays with multiple dramatic events, such as the infamous "Immaculate Reception" of the 1972 AFC football divisional playoff.

TIP FROM A READER

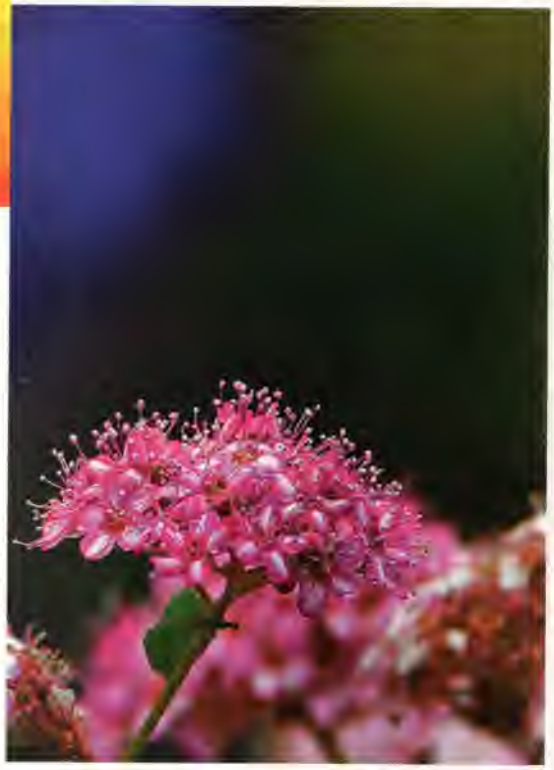
An easy way to take photos of ceilings of cathedrals is to simply set the camera's 10-sec self-timer and rest it on the floor. On digital cameras the rear screen is parallel to the lens, so just make sure you're under what you want to photograph.

Dale La Follette
West Linn, OR

VANGUARD
www.vanguardworld.com
AUCTUS Plus Series Professional Tripods
(ESHP) Extreme Support Height Positioning Wheel System
Sand proof leg locks
Legs adjust to 25, 50 & 80 degree angles
For studio or outdoor
• Ultra stable
• Precise positioning & fine tuning
• Supports extreme loading weight
Available in aluminum and carbon fiber models
3/8" to 1/4" adapter wheel
Curved rubber feet provide solid footing at any angle and convert to anti-rust spikes.
Includes bonus snow shoes.
You can find Auctus Plus and other VANGUARD accessories at these retailers:
Adorama (NYC)
www.adorama.com
800-223-2500
The Camera Shop (Lansing, MI)
www.lansingcamera.com
888-717-4462
Ace Photo (Ashburn, VA)
www.acephoto.net
703-430-3333
www.vanguardworld.com | 800-875-3322 | VANGUARD USA Inc. Whitmore Lake, MI 48189
Distributed in Canada by Digitec Trading Inc. www.digitectrading.com
Join us on flickr flickr.com/photos/VanguardPhotoUs
facebook.com/VanguardPhotoUS
twitter.com/VanguardPhotoUS

Varied Viewpoints

Our winners saw nature up, down, and all around



3rd Place
$100 Prize

PAUL THOMAS, 44, CONSTRUCTION WORKER, EAST ALTON, IL

"This was taken in my backyard—I often walk out here looking for flower shots, insects, birds. I noticed that the colors of this *spirea japonica*, against the background of a purple clematis, grass, and yellow daylilies, worked rather well. I like the fact that I can step outside and capture the beauty of nature right here at home." (flickr.com/photos/tumorboy) **TECH SPECS:** Nikon D300 with 80–400mm f/4.5–5.6 Nikkor AF VR lens, Nikon Speedlight SB-800; 1/250 sec at f/11, ISO 400. Saturation and contrast adjusted in Adobe Photoshop CS3.

2nd Place
$200 Prize

DANIEL WHITTEN, 18, STUDENT, TULSA, OK

"My grandparents were visiting, and I wanted to show them how my new remote flash worked. I decided to photograph this sea biscuit: These have an intricate pattern that's difficult to see in normal lights. After propping the shell between two stacks of books, I placed my flash underneath it, and, using my cable release, exposed and captured it from above." (flickr.com/photos/dwhittenphoto) **TECH SPECS:** Tripod-mounted Canon EOS Rebel XT with 60mm f/2.8 Canon EF-S Macro lens and Vivitar 285HV; 1/250 sec, f/8.0, ISO 100. RAW converted in Adobe Camera Raw, adjustments in Adobe Photoshop CS3.

MONTHLY PHOTO CONTEST

Want to enter? Get all the info you need, including the official rules, at PopPhoto.com/YourBestShot.

So much power, it'll blow you away!

NEW Corel® PaintShop Photo® Pro X3 Ultimate has powerful editing tools, KPT® filters, and now more than $200 worth of photo-editing extras that bring more creativity to any photographer's toolbox. It's the easiest way to get professional-looking photos.

Try it for FREE at: **www.corel.com/popphoto**

Find PaintShop Photo Pro X3 on select HP machines.

$99.99 SRP
Dealer may sell for less.

COREL

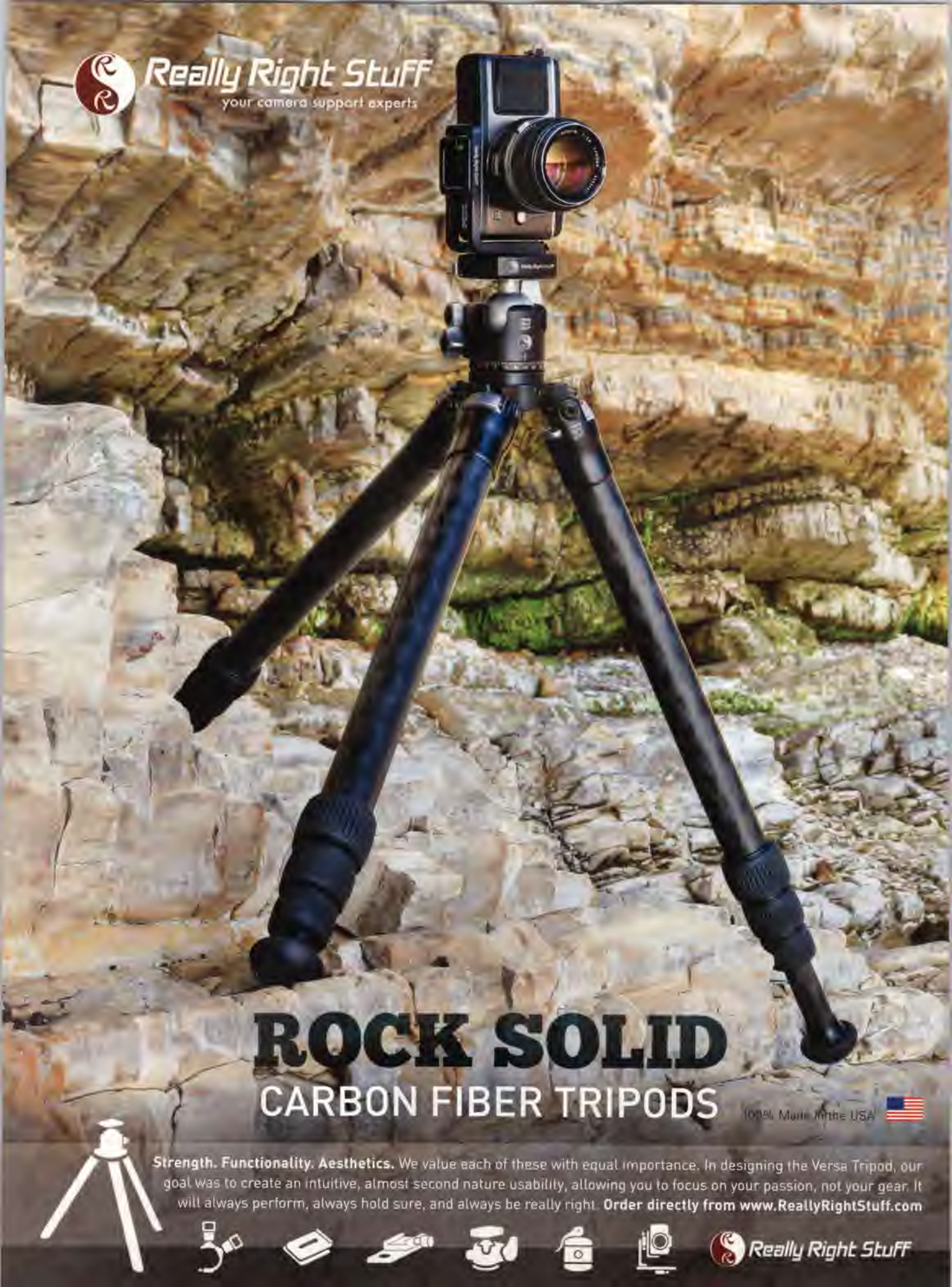
Available at the following retailers: amazon.com BEST BUY CDW DELL STAPLES

1st Place $300 Prize

JOSHUA CRIPPS, 29, NATURE PHOTOGRAPHER, SANTA CRUZ, CA

"I spent a summer working in the Aleutian Islands with an auklet conservation project. We lived in the shadow of this volcano, Gareloi, and one day toward the end of the project we decided to hike to the top. It was a slog—a vertical climb through knee-high grass, then shifting snow. When we reached a slope of rock and snow that we couldn't pass without climbing gear, we stopped instead to savor the view. The wind was still, the sun blocked by a layer of clouds, and I was able to capture the sight of steam billowing up from the crater, with the North Pacific in the background." (www.joshuacripps.com)

TECH SPECS: Handheld Nikon D300 with 18–200mm f/3.5–5.6 Nikkor VR lens; 1/1000 sec at f/10, ISO 200. Adjustments in Adobe Photoshop CS2.


Really Right Stuff
your camera support experts
ROCK SOLID
CARBON FIBER TRIPODS
100% Made In the USA
Strength. Functionality. Aesthetics. We value each of these with equal importance. In designing the Versa Tripod, our goal was to create an intuitive, almost second nature usability, allowing you to focus on your passion, not your gear. It will always perform, always hold sure, and always be really right. Order directly from www.ReallyRightStuff.com
Really Right Stuff

HOW

EXPERT TIPS AND TECHNIQUES FOR BETTER PHOTOS

GO UNDERGROUND AND UNDER THE SEA FOR AMAZING NATURE PHOTOS 42

52

TAME DAPPLED LIGHT OUTDOORS

44

FIX LANDSCAPES FIVE WAYS

48

CREATIVE THINKING

PLANNED ENCOUNTER

THOMAS P. PESCHAK/SAVE OUR SEAS FOUNDATION

Great wildlife shots take preparation and luck

ADHERING TO basketball legend Bobby Knight's adage that success lies in "the will to prepare to win," Thomas Peschak, the chief photographer for the Save Our Seas Foundation, prepares for expeditions by thinking through everything he needs to bring back distinctive images. Witness this South African conservationist's once-in-a-lifetime journey, with a film crew, in 2008 to Aldabra in the Seychelles, one of the most remote places on earth, with no airstrip or shipping lanes nearby.

An ultra-wide angle and a lot of prep work got Peschak close to this Aldabra giant tortoise.

Peschak began preparing his monthlong trip a year in advance. He spent weeks reviewing other photographers' work and pondering what elements would offer multiple layers of visual narra-

tive. And he read all the related scientific literature and spoke with researchers who had worked there.

"I create ideas for new images by putting together all these things in my mind," he says. "I also sketch out most of my images on paper so I come home with iconic and novel photos. The hardest thing isn't taking a picture, it's creating the picture you want to make."

He wanted to capture an Aldabra giant tortoise in a way that showed its connection with both land and sea. He also wanted to accentuate its prehistoric quality by shooting from a low angle using a wide lens. The key, he thought, would be to get the ocean in the background. But tortoises live in the dense bush, so he decided to photograph up on a bluff.

As usual, things didn't work out according to plan—they worked out better. Peschak discovered that a few tortoises had learned to forage for food on the beach. He spent about 10 days following them after high tide, until a storm gave him the opportunity for the shot he'd originally envisioned. He calls the photo "Beachcomber."

With a Nikon D3 and 14–24mm f/2.8 Nikkor at 14mm, he maneuvered until the sun was behind the tortoise for the forward shadow, then fill-flashed using a corded Nikon SB-800 Speedlight off-camera from the upper left. Exposure: 1/200 sec at f/22, shot in manual. "All the preparation makes you very aware of how you're doing in terms of results," he says.

This result, for Peschak, is more than just an image. "Photography is a conservation tool," he says. "Numbers are great, but photographs truly capture someone's attention and make them feel for a species. They can inspire people to use their abilities to ensure that the natural world remains healthy and intact." —*Laurence Chen*

Fine Tuning

Sometimes less is more in photo fixes

JESSIE HOYE, WWW.FLICKR.COM/PHOTOS/JESSIEHOYE

See how the horizon is placed one-third of the way down in the frame? That's exactly where the Rule of Thirds says it should be.

YOU'LL NOTICE very little difference between the Before and After versions of this photo because it needed very little fixing. The composition and exposure of this shot by Jessie Hoye of Berkeley, CA, are right on the money. But the picture looked slightly flat in the water and sky, and we felt that these could use a little boost.

Working in Adobe Photoshop CS5, we used masks on two Curves Adjustment Layers to separately tweak the water and the sky. In each layer, we used a shallow S-curve tailored to its

specific tonal range, brightening the highlights and deepening the shadows.

Total time fixing: 5 minutes.

Hoye shot with a Nikon D60 with 10–20mm f/4–5.6 Sigma DC lens; exposure, 1/4 sec at f/13, ISO 100. —*Dan Richards and Debbie Grossman*

DID YOU KNOW? WHY MIDRANGE APERTURES ARE SHARPER

JUDGING BY reader mail, there's still some confusion out there about aperture selection and image sharpness. While smaller apertures (e.g., f/22) produce deeper slices of sharpness from front to back, the central focused-upon subject of your picture will usually always be sharper when captured by an intermediate aperture (e.g., f/8). Why? Because of diffraction. When light rays strike an object, such as the diaphragm blades of a lens, the rays tend to bend or diffract, an action that adversely affects sharpness. When you set your smallest aperture, a greater percentage of all the light rays transmitted through the lens are diffracted, resulting in a subject that's relatively fuzzy compared to what's possible with the less-diffracted rays typical of wider apertures. And why do the widest apertures (e.g., f/2.8) also produce a relatively fuzzy subject? That's a subject for another "Did You Know."

10% OFF

Popular Photography readers get an ***EXTRA 10% OFF*** *with the code* **MU7832** when buying online.

Portrait Professional 9 is the world's first intelligent retouching software trained in human beauty. It requires no skill to turn an ordinary portrait into a thing of beauty in minutes. Try it for yourself and see how quickly and easily you can achieve great results.

Download your free trial now!
www.PortraitProfessional.com

PortraitProfessional 9

QUICK TIP

Starbursts

You don't need a filter for this special effect

WANT TO transform a light source in a photo into a many-rayed starburst? You could buy an accessory starburst filter and thread it onto your lens. But save yourself some cash and try this: Shoot at your smallest aperture. It worked for Kevin McNeal, a landscape specialist based in Oregon, for his photo of northwestern wildflowers above.

The difficulty with this trick is controlling flare. "I tried to reduce the amount of light striking my lens from the setting sun," says McNeal. "First I positioned my camera so that one of the avalanche lilies partially blocked the sun, and because the positioning had to be exact, I used a tripod. Then, I waited until the sun started to dip below the horizon before shooting."

That patience was necessary. "In test shots made before the sun started to drop from view, its light blew out all color and detail in the lilies," he reports.

The window for success here is only a minute or two, so McNeal suggests bracketing exposure and getting off as many shots as possible. Another requirement? A lens that's well-coated to suppress flare.

Kevin McNeal shot with a Canon EOS 5D Mark II and 17–40mm f/4L Canon EF lens. Exposure: 1/50 sec at f/22, ISO 500.

KEVIN MCNEAL; KEVINMCNEALPHOTOGRAPHY.COM

30-SECOND SOFTWARE

PRINTING MULTIPLES

To duplicate an image on a single sheet of paper, the quickest way is in Adobe Bridge CS5. Go to Window > Workspace > Output. Click the button for PDF, and fill in the options for the document size and quality. The most important options are under Layout: Check the box for Repeat One Photo per Page, then play with the spacing until the images are the size you like. To see it, hit the Refresh Preview button at the top of the Output tab. When you're done, hit Save. Print via your PDF viewer or open the PDF to print from Photoshop.

What's This?

Hähnel Inspire LiveView Remote

A wireless remote camera trigger with live-view video feed ($300, street).

▶**How it works:** Available for Canon and Nikon DSLRs, the Inspire's shoe-mount transmitter (not shown) wirelessly streams a video signal from either its own built-in video camera or the DSLR's live view to a receiver (shown above).

▶**What it does:** Allows you to view a real-time TTL live-view image, focus, and then fire the shutter at distances up to 197 feet. It's a significant improvement over most wireless camera firing systems, which provide no TTL live-view image of the subject.

▶**When to use:** Whenever a remote camera position prevents you from physically firing the shutter yourself.

PETER KOLONIA (HÄHNEL); SHOCK/FOTOLIA.COM (LCD IMAGE)

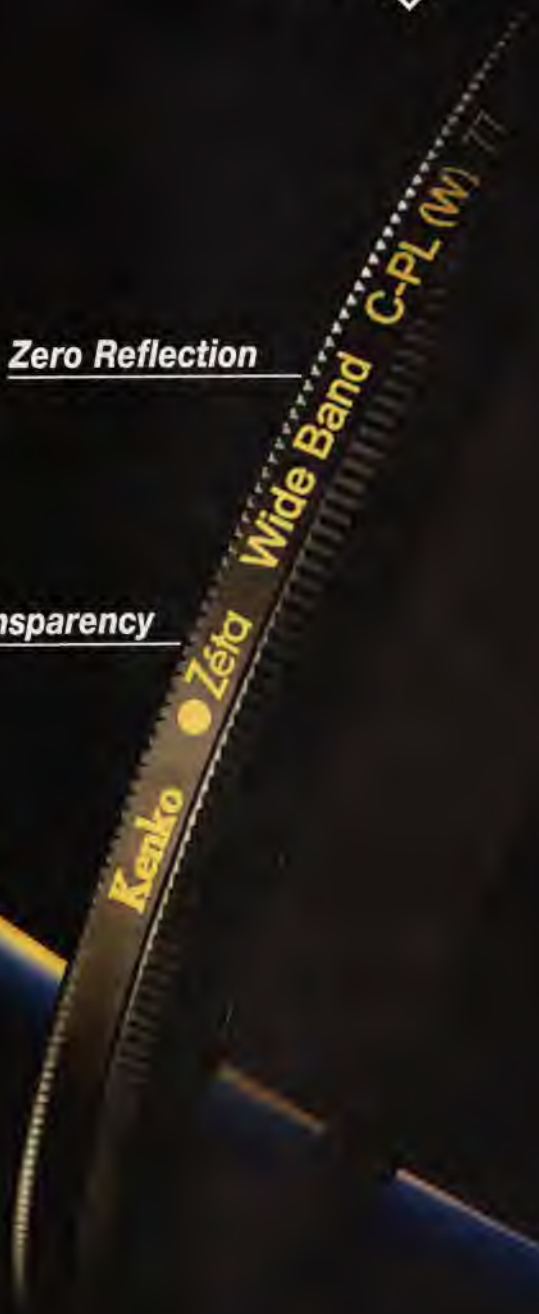
Zéta

THE ULTIMATE FILTER

Kenko

Zero Reflection

Super High Transparency



ZR (Zero Reflection) Super Multi-Coating

This innovative coating will not interfere with any color or light transmission. Reflections are eliminated by allowing light to enter the filter at virtually any angle. This filter will produce superior results and can be used with any type of lens (wide angle to telephoto).

Ultra Smooth Surface - Nano Glass Technology

Our Nano Glass Technology creates an ultra smooth surface from the finest particles of glass, making it stain and scratch resistant without any effect to the image.

High End Constructed - Ultra Thin Frame

The glass of this lens is precision machined and attached using Retainer Ring Mount Technology giving this filter an unsurpassed durability. An ultra thin frame also makes it wide-angle lens compatible.

Wide-Band Polarizing Film

The Kenko Zeta wide-band polarizing film transmits light more evenly across the visible spectrum to give a more neutral color balance than traditional circular polarizing filters provide.

C-PL (W) ***UV L41 (W)*** ***Protector (W)*** ***ND4 (W)*** ***ND8 (W)***

EXCLUSIVE DISTRIBUTION BY:

THK PHOTO PRODUCTS, INC. | 7642 Woodwind Drive, Huntington Beach, CA 92647

Tokina · HOYA · Kenko · **SLIK** | Visit our website at **www.thkphoto.com**

Caves & Caverns

Exploring the subterranean landscape

SIMPLE ▲ COMPLEX

FORGET SUNNY landscapes. For adventurous photographers, there's an alternate world to explore below ground. And with thousands of caves and caverns across the U.S, you've likely got several nearby, from the saltpeter caves of Alabama and Kentucky to the marble caves of California and Oregon. Tennessee alone has some 10,000 documented ones.

Caver and photographer Dave Bunnell (www.underearth.us), who has been shooting underground for nearly 40 years, breaks caves into two types: dramatically lit show caves, with guided tours, and undeveloped caves, where you must bring all the lighting—including a good headlamp.

Show caves offer accessibility and enticing light, but getting good photos can be tough. Says Bunnell, "They have a lot of limitations. You're time-restricted on a tour, most don't allow tripods, and you have to keep your flash on the camera." Mixed lighting (including fluorescents) is a problem, too.

But some popular attractions (such as Carlsbad Caverns) have self-guided trails, and some make arrangements for photographers.

More enticing, says Bunnell, are undeveloped sites, including lava tube caves. Some require spelunking experience; others are accessible to beginners' caving groups. But some you can simply walk in to. Almost all are totally dark.

Bunnell's solution? Multiple slaved flash units to light deep into the cave. "Off-camera flash gives more depth to the photo," he says. "I usually use at least two, sometimes up to five or six."

NEVERSINK PIT Bunnell shot this 150-foot drop in Alabama. For sites near you, try www.caves.org or cavern.com.

A wide-angle lens is plenty. "Wider is better since sometimes you don't have the option of getting further away," he says.

And always protect your gear against the inevitable dust and moisture. *—Jeff Wignall*

WHERE TO GO SHOW CAVES

- **Carlsbad Caverns National Park, Carlsbad, NM.** An 8.2-acre Big Room (partially wheelchair-accessible); ranger- and self-guided tours. Mexican free-tail bats exodus, summer twilights.
- **Howe Caverns, Howe's Cave, NY.** An elevator takes you 156 feet below the surface; some tours include boat rides.
- **Mammoth Cave National Park, Mammoth Cave, KY.** More than 390 miles of explored caves. Variety of guided tours.

UNDEVELOPED CAVES

- **Ape Cave, Mt. St. Helens National Volcanic Monument, Amboy, WA.** Two trails: easy and more challenging.
- **Craters of the Moon National Monument, Arco, ID.** Four lava-tube caves accessible from loop drive.
- **Lava Beds National Monument, Tulelake, CA.** Some caves have ladders and trails; easy walks to strenuous excursions.

DAVE BUNNELL

Reach Your On-Camera Flash Potential

Sale: $69.90 #2332

Sale: $149.90 #2331

Sale: $429.90 #2333

Collapsible Umbrella Flash Kit

Perfect for travel, this 43" collapsible umbrella provides a wide light spread with telescoping shaft and collapses to 14.5".

Includes: 43" Optical White Satin Collapsible Umbrella with Removable Black Cover, Adjustable Shoe Mount Bracket and 8' Light Stand

Apollo™ Flash Kit

Ideal for the on-location photographer, the 28" Apollo softbox offers quality directional lighting in a compact unit. No adapter ring is needed as the unit is built on an umbrella frame and sets up in seconds.

Includes: 28" Apollo™, Adjustable Shoe Mount Bracket and 8' Light Stand

The Ultimate Flash Kit

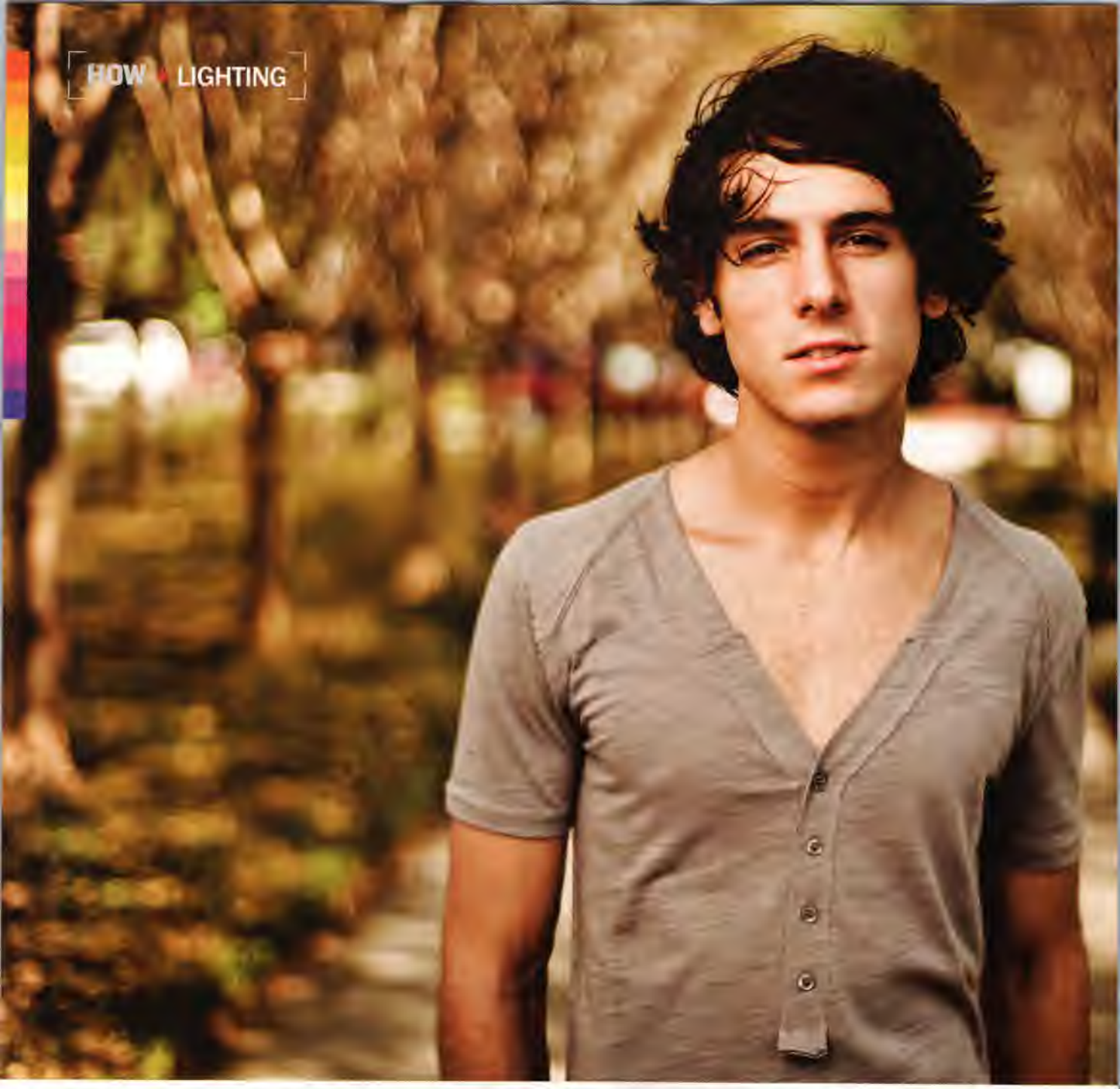
All-metal construction makes this versatile unit a top choice among pros. Mount a speedlite, receiver and battery onto one compact unit, making travel and setup a breeze.

Includes: Magic Slipper™, 18" × 42" Travel Asymmetrical Stripbank and 8' Light Stand

For details, visit FJWESTCOTT.com or call 800.886.1689

westcott®
EST. 1899

Photo by Andrew Kornylak. ©F.J. Westcott Co. All rights reserved.



Spot Light

How to deal with dappled light

IN THE SUMMER of 2009, Orlando-based pro Gage Young was photographing rising singer/songwriter Dave Melillo against a receding allée of trees along a length of sidewalk in Celebration, FL. While graphically interesting, these trees broke up the sunlight into dappled hot spots and shadows, creating too-bright blotches on Melillo's forehead and sections of his shirt while rendering most of his figure a featureless black. Young's solution:

GAGE YOUNG/WWW.GAGEYOUNG.COM

Gage Young's portraits of musicians have appeared in *Rolling Stone*, *Alternative Press*, and other music industry publications.

■ Evenly light the subject. He did this by throwing the musician completely into shade, which eliminated the contrasty pools of light. A 36x42-inch panel of black foamcore board clamped to a lightstand next to Melillo did the trick. Standing in the shadow of this board, Melillo lost the blotches. The strategy introduced a new problem, though: Now in shade, the musician was several stops darker than most of the

COMBATTING DAPPLED LIGHT

SIMPLE ▬▬▬

GIVE US ONE DAY

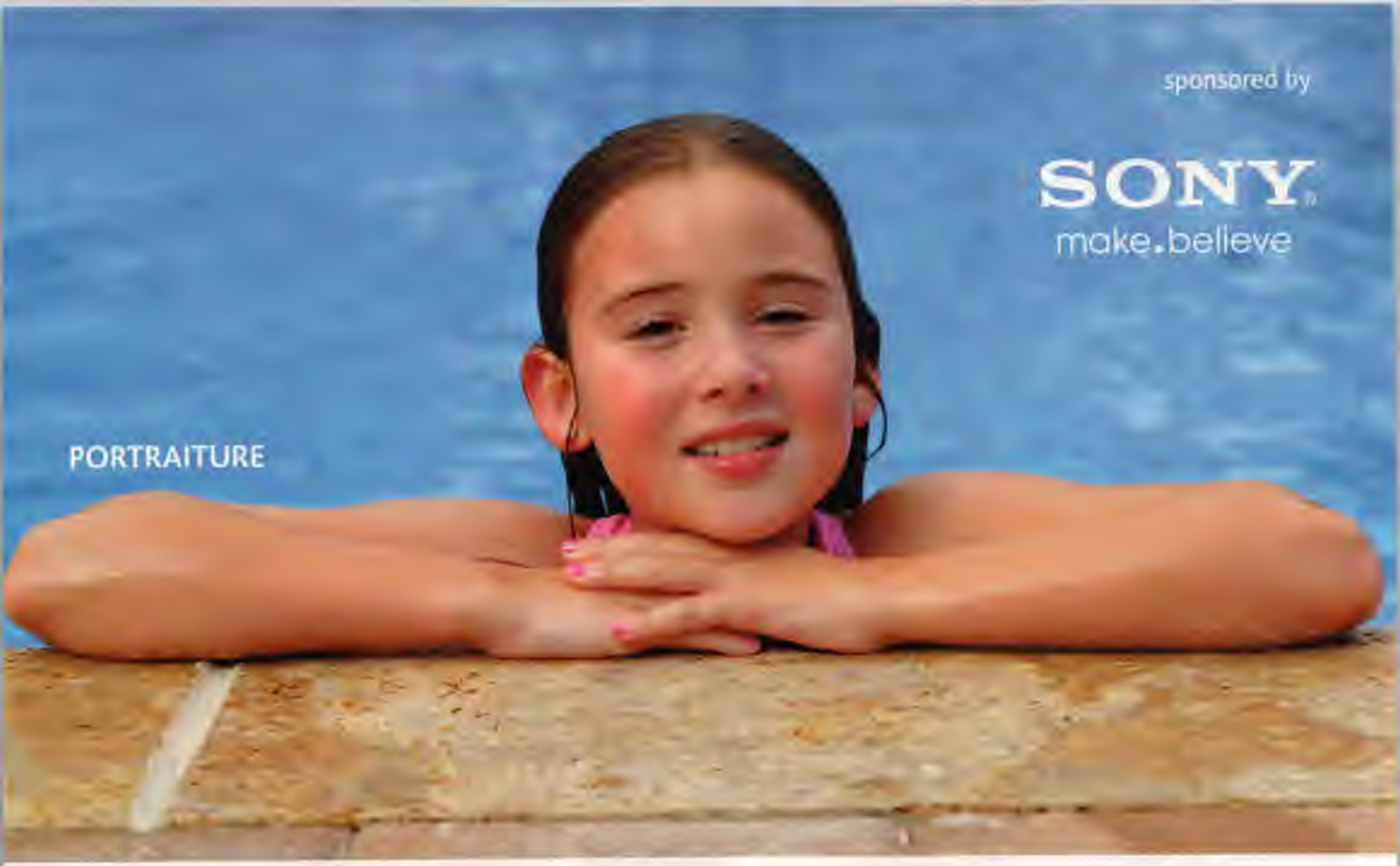
We'll make you a better photographer

POPULAR PHOTOGRAPHY presents digitaldays

Photography & Video Workshops

UPCOMING WORKSHOPS

Austin	Seattle	San Diego	Los Angeles	Dallas	St. Louis	New York	Stamford
TX	WA	CA	CA	TX	MO	NY	CT
Feb 12-13	Feb 26-27	Mar 5-6	Mar 19-20	Apr 9-10	Apr 30-May 1st	May 21-22	Jun 4-5



Come to one of our photography & video workshops and learn how to make great pictures!

Our instructors are fun and inspirational, and keep everything fresh, upbeat and a little bit funky. They make technical terms easy to understand, and explain camera functions so they, well, click. The four-hour Saturday workshop and full day Sunday session are fulfilling experiences packed with information, laughs, socializing and fantastic photography. You'll learn the complete digital process, including creative and technical angles, composition and camera functions, and software-based skills such as editing, printing and photo sharing. Come to one of our photography workshops and learn how to make great pictures!

- Inspire you with creative tips and techniques
- Explore the potential of light and composition
- Teach you the power of digital workflow
- Master your camera's settings for any brand
- Live model shoot

NEW: BEGINNER VIDEO!
Saturday, 9 AM - 1 PM

All you need to know to shoot HD video on your DSLR, camcorder or point-and-shoot. Capture those moments and cherish for a life time.

All Digital Days Workshop attendees are eligible to win a Sony camera. One will be given away at each workshop in 2011.

digitaldaysphoto.com

SIGN UP TODAY!

ddinfo@bonniercorp.com • 888.243.6464

Washington	Philadelphia	Boston	Buffalo	Cleveland	Kansas City	Las Vegas	Denver	New York
DC	PA	MA	NY	OH	KS	NV	CO	NY
Jun 11-12	Jun 25-26	Jul 9-10	Jul 23-24	Aug 6-7	Sep 17-18	Sep 24-25	Oct 8-9	Oct 22-23

Hints for Scenics

Five tips to make your landscapes great

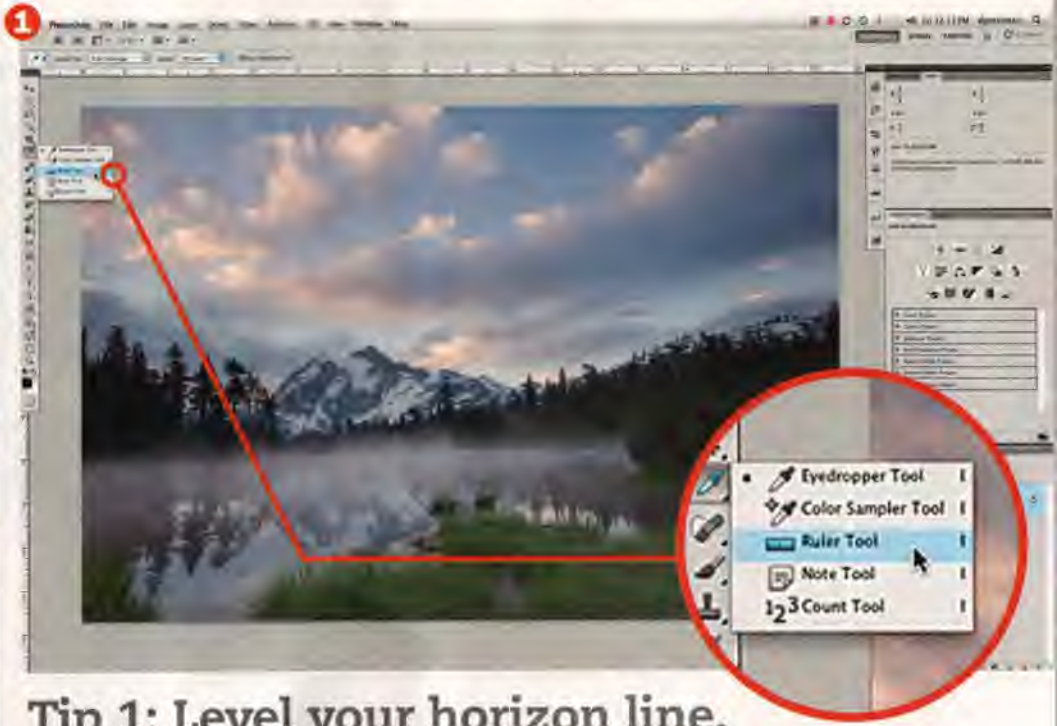
Our version of this landscape uses all five tips, but you can use any that suit your picture.

ARMED WITH a DSLR, a good lens, a tripod, and perhaps a split neutral-density filter, you can make lovely landscape photographs in the field, many of which won't need retouching at all. But if somehow, despite your best efforts, you still end up with a skewed horizon line or a so-so sky, Adobe Photoshop can help.

And even in situations where you love what you captured, you can use Photoshop to improve, enhance, or (simply for the heck of it) modify your picture to make it look the way you think it should.

Here are five tips for improving your landscape photos, whether they need it badly or not. Use one or all of them on a given picture, and in any order you like. *—Debbie Grossman*

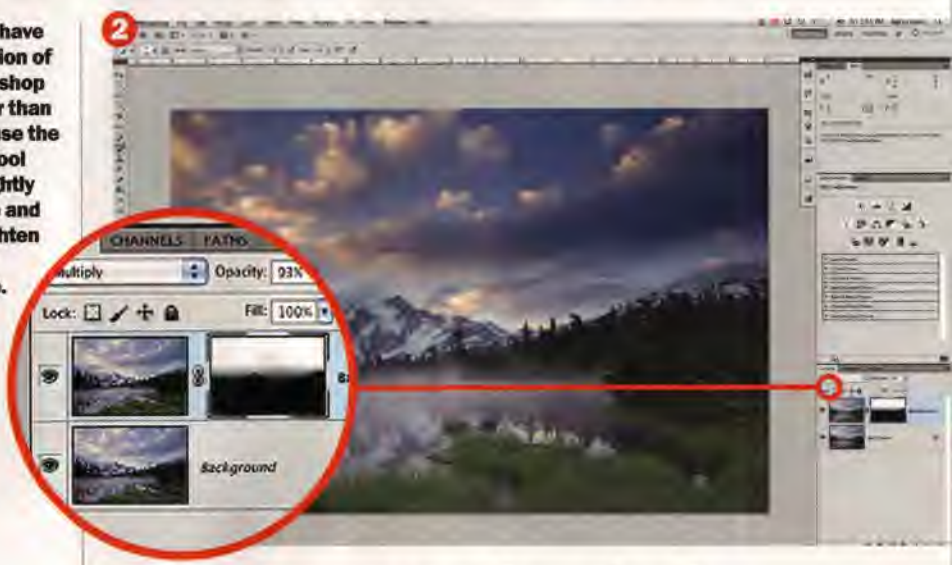
DENE MILES (ORIGINAL)



Tip 1: Level your horizon line.

A slanted horizon plagues many an otherwise excellent landscape. Even with a tripod, it's hard to tell by eye that you've got it right. Photoshop CS5 finally includes a tool for straightening as part of the Ruler tool. Find it by clicking and holding the eyedropper in the toolbar. **Use the ruler to draw a line along the horizon where it should be straight**—in this case, the water line. Then click the Straighten button in the Options bar at the top of the screen.

If you have a version of Photoshop earlier than CS5, use the crop tool to slightly rotate and straighten your image.



Tip 2: Pump up the clouds.

Want to add more drama to a cloudy sky? Here's a quick trick. **Duplicate your Background Layer, then use the pulldown menu to choose the Multiply Blend Mode.** The effect will most likely be too strong, so dial down the layer's opacity until you get a look for the more realistic sky. Add a mask to the layer, and grab the Brush tool and paint with black on your image to hide all the areas that you don't want your Multiply blend to affect.

F.Y.I.

IT'S FUN TO TAKE A FEW liberties with your nature photos. Unlike a portrait or architectural shot, your viewer will have only a vague sense of how it really looked. So you can go a bit farther with edits: Add more vibrance or saturation than you normally would, make your clouds more dramatic, or make distant mountains more contrasty than they would appear in reality. Experiment with white balance, too. If you don't go too far, no one will be the wiser.

Tip 3: Open up shadows.

It's often hard to capture detail in both the sky and the ground. To fix this, try the Shadows/Highlights adjustment. Duplicate your layer, and go to Image > Adjustments > Shadows/Highlights. Check the box for Show More Options, then **move the Tonal Width slider left so it adjusts more of the darker tones without affecting too many midtones.** Here, the idea is to bring out some detail in the trees. You can reduce the intensity of the effect by moving the Amount slider to the left.

If you shot in RAW, try for shadow detail using a converter before heading to Photoshop.

Tip 4: Add spot contrast.

You may have great contrast in part of your image, but other areas still look flat and dull. **Fix them individually by using a Curves Adjustment Layer and a mask in combination.** First, make the Adjustment Layer. Click on the pointer finger in the Curves dialogue, place it on the area you want to lighten, and drag upward. Do the same on a tone you want darker, but drag downward. Fill the mask with black to hide adjustments; use the Brush set to white to paint them back in. Do as many of these as needed.

Use a large brush to mask bigger areas.

Tip 5: Filter it.

Want a different overall look? Try a Photo Filter Adjustment Layer. **Click the Photo Filter button in the Adjustments Panel, and use the pulldown menu to pick one you like.** Move the Density slider left or right to decrease or increase, respectively, its intensity.

NEWEGG.COM
Voted Best Place to Buy Online
7 Years in a Row! -Shopper's Choice Award

YOUR Canon SUPERSTORE

Search Newegg: 30-120-459 Canon
EOS 60D 18.0 MP 3.0" LCD Digital SLR Camera w/ EF-S 18-135mm f/3.5-5.6 IS Lens

Canon Photo Contest Winner
Travel Horse Trials at the Palio by Transoceanic

Search Newegg: 30-120-468 Canon
PowerShot G12 10.0 MP 2.8" LCD 5X Optical Zoom 28mm Wide Angle Digital Camera

Search Newegg: 30-120-469 Canon
PowerShot SX30 IS 14.1 MP 2.7" LCD 35X Optical Zoom Digital Camera

Search Newegg: 30-120-455 Canon
S95 10.0 MP 3.0" LCD 3.8X Optical Zoom 28mm Wide Angle Digital Camera

GREAT IMAGES START WITH CANON!

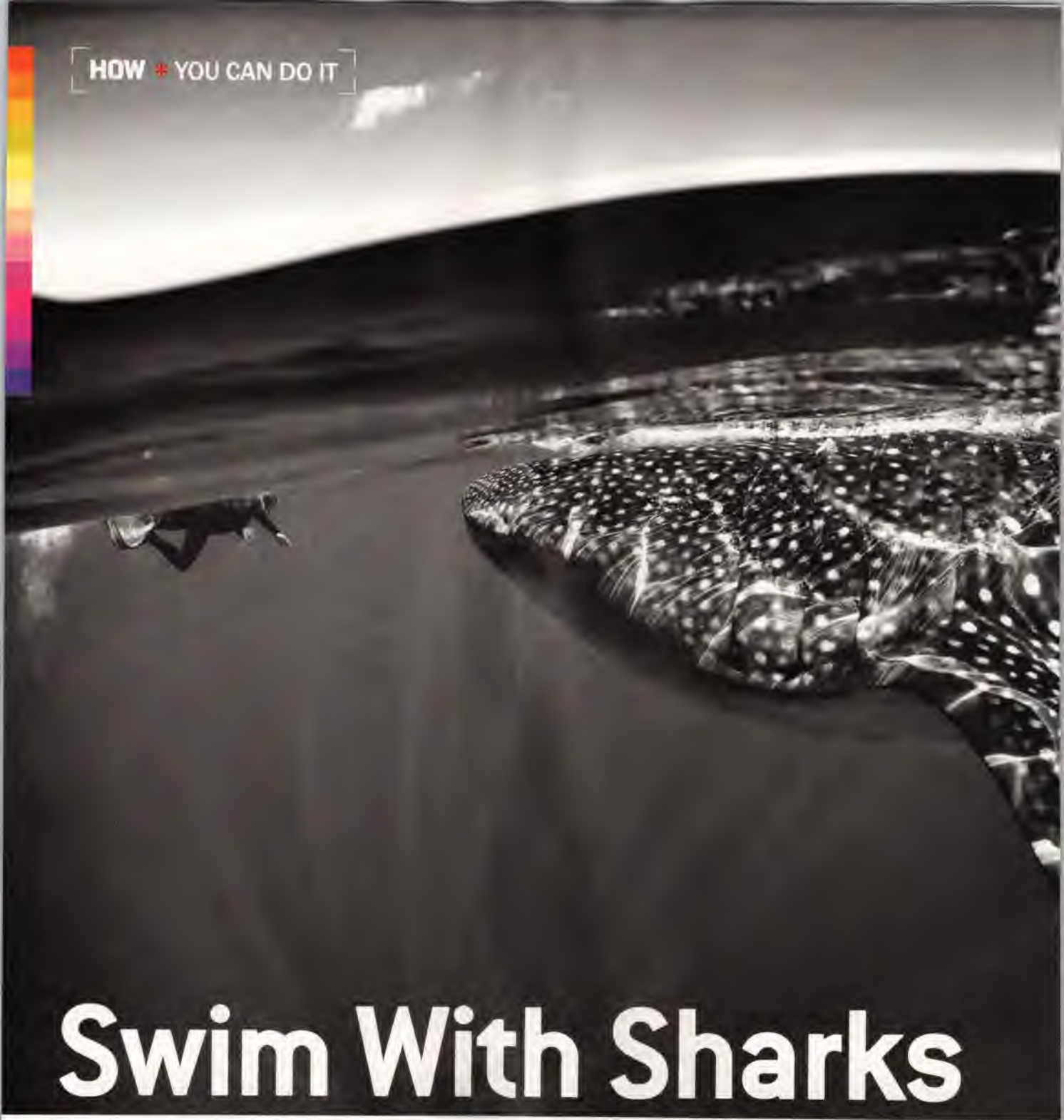
WITH CANON'S PROMINENT SELECTION IN DSLR AND INNOVATIVE EOS SLR TECHNOLOGY, ANY PHOTOGRAPHER OR ENTHUSIAST CAN SHOOT LIKE A PRO. NEVER MISS A SHOT AGAIN. **SHOP NEWEGG.COM TODAY!**

www.newegg.com/canon

ONCE YOU KNOW, YOU NEWEGG.®

Follow us on:

newegg.com®



Swim With Sharks

It's not as dangerous as you might think

GO AHEAD, throw caution to the wind and shoot to thrill. That's what retired foreign-exchange trader Julian Cohen and wife, Ildi, did when they signed on for a six-day dive adventure to the Yucatán. His goal? Capturing nature's biggest fish in stunning pictures.

For more of Julian Cohen's photography, visit www.juliancohen.com.

Up to 40 feet long and weighing as much as 22 tons, the docile, slow-moving whale shark inspires equal parts fear and awe. "For me, any time I can get so close to such a massive animal, it fills me with wonder and elation," says the Singapore-based Cohen. "They're real gentle giants, though, and represent little danger. They're also easy to find if you join a dive trip organized around their life cycles."

Whale sharks are filter feeders, sucking in seawater filled with tiny prey. They gather to feed on

JULIAN COHEN

Iidi Cohen swims with a 20-ton whale shark. Captured from a few feet away using the Nikon D3 (A), Sigma 15mm f/2.8 fisheye lens (B), and Subal ND3 underwater housing (C).

algae, plankton, krill, and fish eggs *en masse* at warm-water locations around the world. Closest to the U.S. is the Isla Mujeres off Mexico's Yucatán peninsula.

"The sharks aggregate in July and August, and can number as many as 500 in one area," Cohen says. "When they're in, up to 40 boats per day ferry tourists and divers out to them."

You don't need scuba gear—in fact, it's not allowed in many places where whale sharks gather. Snorkeling with an underwater compact, you could take home great pictures and wonderful memories, too. —*Peter Kolonia*

Step 1

Find an organized dive tour. Websites such as the Isla Mujeres tourist board (www.isla-mujeres.net) and the annual Whale Shark Festival (www.whalesharkfest.com) are good. Since each boat is allowed only three divers in the water at a time, pick tour companies with smaller boats. Also, look for tours that stay out longer, offer on-board food and drink, and have bathrooms.

Step 2

Gather your photo gear. A waterproof compact will work, but a DSLR is the smarter choice. Pick one that has acceptable noise levels at high ISOs and for which you can buy or rent a dedicated underwater housing. Because your subject is massive, an ultrawide or fisheye lens is a must.

Step 3

Watch your lighting. Only snorkelling is permitted, so you'll be working close to the surface. Put the sun at your back, so the shark is frontlit. Get close, so you have as little water between you and your subject as possible. "Don't worry," says Cohen. "They usually won't bump, touch, or swipe you. To get a little closer, I hold my camera housing at arm's length."

Final Step

Clean up in postproduction. Plan to remove tiny debris floating in the water, as well as to tweak contrast and white balance, in an image editor. Cohen converted his image to black-and-white because it exaggerated the distinctive body markings of this monochromatic monster.

Text and photos by Jon Comforth

DESERT SONG

From sweeping wildflower blooms to mountain vistas to towering dunes, the California desert in early spring has it all—plus warm weather, to boot.

WILDFLOWERS, ANZA-BORREGO Jon Comforth used a Singh-Ray LB warming polarizer on his 17–40mm f/4L Canon EF lens to heighten colors, plus a 3-stop soft-edge split ND filter to balance land/sky exposures. Tripod-mounted Canon EOS 5D Mark II; 1/10 sec at f/16, ISO 100.

BARREL CACTUS, ANZA-BORREGO **Cornforth used both a Singh-Ray LB warming polarizer and 2-stop hard-edge split ND filter for this shot at sunrise. Tripod-mounted Canon EOS 5D Mark II with 17–40mm f/4L Canon EF lens; 2 sec at f/22, ISO 100.**

ONE OF THE MAIN reasons I began my photography career was as an excuse to avoid winter and to travel where the sun takes me. To help you do the same, here are some of my favorite Southern California antidotes to cold and damp. Any of these destinations, individually or combined, would make for a perfect one-week (or longer) nature-photography getaway.

Anza-Borrego Desert State Park

Located over the mountains three hours east of San Diego, this is California's largest state park and contains more than 500 miles of dirt roads, plus 12 wilderness areas with miles of hiking trails. While summer can be incredibly hot, one of the best times to visit is in late February through March, when the desert wildflowers bloom. The peak varies each year, so check the park's website (see the sidebar on page 109) for up-to-date info.

My favorite place for wildflowers is Henderson Canyon Road. With fields of flowers just steps from the pavement, cars park all along this road on a busy weekend. To avoid the crowds, I park and hike due north towards the mountains, where I've found the best flower displays after about a mile. I get there early enough to shoot while blossoms are still bathed in golden light an hour before sunset.

Use a wide-angle lens and a polarizing filter, and set your camera low to the ground—a tripod with a removable center column makes this easier. After the mountains to the west block the last rays of sun, the sky above will be much brighter than the shaded flowers, so a split neutral-density filter is a must to control the contrast—I use a 2- or 3-stop hard-edge ND.

For another good wildflower venue, park at the Hellhole Canyon trailhead and hike due north through the desert back towards the visitor center. Keep an eye out for blooming barrel cactus and flowering ocotillo. While I prefer to photograph in this area at sunrise using a wide-angle lens, barrel cactus flowers make for beautiful macro subjects if you use a collapsible light diffuser under harsh midday light. And look for the red

flowers of the chuparosa—I've used this plant as a foreground to frame Indianhead Peak at sunrise.

Just north of the visitor center, a short hike from the end of the road, you'll find Borrego Palm Canyon, with fantastic displays of flowering yellow brittlebush. Watch for the endangered desert bighorn sheep on the mountainsides above the canyon floor.

Death Valley National Park

Three hours northwest of Las Vegas and about five hours northeast of Los Angeles, Death Valley is the hottest and driest, as well as sixth-largest, of the national parks. It contains the lowest point in North America at Badwater Basin, 282 feet below sea level, while Telescope Peak in the Panamint Mountains towers 11,049 feet above the valley floor. During the summer, temperatures can top 120°F, but winter and early spring are much more comfortable, with highs only in the 70s and 80s.

Camping and lodging in the park is based around Furnace Creek and Stovepipe Wells. Both of these require a fair amount of driving to reach the most popular vistas. Fortunately, the Mesquite Flat Dunes are between them. Though not the largest or tallest in the park, these are conveniently located just north of Highway 190.

But because they are so accessible, they can be almost impossible to photograph without people, let alone without footprints. Those iconic images every photographer wants, with glowing sand and crisp dune edges, are possible only immediately after a big windstorm scours the dunes clean. I visited many times over several years before I managed to be there as a windstorm subsided—getting sandblasted by 40-mph winds was the price of those photos.

In windy and sandy conditions, try to keep your camera gear inside a tight-closing bag or pack as much as possible. The finer the sand, the more likely that it will get into your pack. Always carry a blower bulb to blow the sand off of your lens—I have scratched expensive lenses when I used a cloth. And never change lenses in a gritty wind.

Photographing the spectacular Badwater salt flats requires an hour drive south of Furnace Creek. I prefer shooting at sunrise when the distant Panamint Range is illuminated by alpenglow. Head straight out from the main parking lot for a mile or more in order to photograph the best salt patterns without any footprints. Better yet, park on the side of the road just after the first big bend one mile south of Badwater, and hike out directly to some amazing formations where the force of the drying salt has expanded into photogenic crust-buckling eruptions.

Use your wide-angle lens, plus a split ND filter to balance the difference in exposure of the salt flats against the mountains. I often use a 4-stop hard-edge filter here.

Most people don't associate wildflowers with Death Valley, but during years after wet winter weather, the brief wildflower displays are incredible. The most photogenic fields are in the south end of the valley, between Badwater and Ashford Mill along Highway 178. Photographing the hills covered in miles of golden desert sunflowers is best at sunrise.

CONTINUES ON PAGE 108

MESQUITE SAND DUNES, DEATH VALLEY
Canon EOS 5D Mark II with 35mm f/2 Carl Zeiss ZE lens on tripod, warming polarizer plus 3-stop soft-edge split ND filter; 1/10 sec at f/16, ISO 100.

SUNSET, SAN ELIJO
Cornforth used the same rig as the shot at far left, but with a Singh-Ray 3-stop reverse split ND filter; 5 sec at f/16, ISO 200.

A WILD WORLD

Ingo Arndt, 42, a wildlife specialist and contributing photographer to the German edition of *Geo* magazine, spends more than half the year on the road, photographing animals everywhere from Alaska to Antarctica and beyond. He took a few hours recently to share insights with Senior Editor Peter Kolonia.

Interview by Peter Kolonia
Photos by Ingo Arndt

RED CRABS
"You have to know your animal's lifecycle and habits," says Arndt. He knew these red crabs spawned only during a new moon, and was there to capture it. Made with a Canon EOS-1Ds Mark III, 580 EX II Speedlite, and 20mm f/2.8 EF lens set to 2 sec at f/19, ISO 100.

GRIZZLY BEAR
"When they're chasing after salmon, it's safe to get within 20 feet of these bears," says Arndt. "They focus completely on the fishing and are oblivious to you." Made in Lake Clark National Park, AK, with a Canon EOS-1D Mark IV and 500mm f/4L lens; 1/1000 sec at f/4, ISO 1250.

How did you start out?

My father was a bird watcher, and when I was a boy we often would go out on weekends. At first, I just wanted something to remember the birds by. Gradually, though, I wanted pictures that were as beautiful as the birds themselves: sharp, with good color, eye contact, and poses or body language that looked right. Especially for the birds that fascinated me.

The first were kingfishers that lived in the forests near my home in Frankfurt. They had more colorful plumage than most birds I had encountered, and it was fun to watch them dive from a height, plunge a meter into the water, and come up with small fish.

Now, almost 30 years later, I still photograph them every chance I get. Back then, though, when I told my parents I wanted to make my living photographing such animals, they laughed. There were maybe five professional wildlife photographers in all of Germany.

How *do* you make a living?

I diversify. I shoot landscapes for calendars and posters. Income from my wildlife is divided between stock photography and editorial work assigned by magazines like *Geo*. I also create exhibition projects like the "Animal Masses" show that's traveling around Europe now. It has over 40 large-scale prints of massive groups of animals, from which I sell prints, posters, calendars, and cards. Several of the pictures you're publishing here [like the penguins, opposite] were taken for "Animal Masses." It was a very expensive undertaking, and before I started, I visited publishers, printers, magazine editors, museums, and galleries with sample images to see if there was interest. There was, and it's been a success.

How did you get the idea?

It all started when I was assigned to photograph the lifecycle of monarch butterflies. I traveled across the U.S. photographing them on the East Coast during the summer, and then following them to Mexico in the winter. There I saw unbelievable numbers of monarchs—almost 400 million wintering in one location. It got me thinking about other animals that migrate or mate by the thousands.

What are your favorite animals to work with?

Mountain gorillas. They're so human-like that you can watch

KING PENGUINS
"For photographers new to wildlife, penguins make a great subject, because they have no fear of humans," says Arndt. "There are plenty of tour boats that will take you to South Georgia Island, off Patagonia, and the best time is right after the birds molt in November." Canon EOS-1Ds Mark III with 17–40mm f/4L EF lens; f/60 sec at f/19, ISO 200.

them for hours. From their expressions and body language, you can sense what they're thinking and feeling—much more so than other animals. It's fascinating how close they are to us. They're big and strong, but gentle, too. I've photographed them maybe 25 times over the years, at distances of usually about 20 feet, and I've never felt threatened.

People often ask me what the most dangerous animal is. They're surprised when I tell them it's not lions, tigers, bears, or gorillas. For me, it's the mosquito. I can't afford a case of malaria. And also people, especially in big cities.

What's the most difficult animal to photograph?

Monkeys. They never really look in your direction, they don't want to make eye contact, they're often shy, and most of them live deep in the rain forest, where it's usually hot, with high humidity and lots of insects. It can be hard to find them, and the light in the rain forest is usually dim. If the sun is shining, the lighting can be very contrasty. The best conditions are under a light cloud cover that diffuses the sunlight but doesn't weaken it much. This can be hard to find. Many monkeys and the mountain gorillas, too, are black. It's hard to get light in their eyes. Also, if you want texture in the black fur, you have to add so much exposure that the the backgrounds often get blown out.

The easiest?

If you want to impress someone, close-ups of insects often work. Most people aren't aware of how colorful and visually fascinating and unexpected insects are.

CHEETAH AND CUBS
"A trick to capturing wildlife when traveling with a tour group is to distance yourself from the group," says Arndt. "The other photographers and their Jeeps were on the opposite side of the termite hill in Kenya. Only I got the cubs!" Canon EOS-1Ds Mark III with 500mm f/4L lens; 1/200 sec at f/5.6, ISO 250.

People aren't used to seeing them with any kind of detail. Great pictures of elephants, eagles, or grizzlies aren't easy, because they've been over-photographed. I haven't seen a surprising picture of a lion in a long time.

What gear do you take?

As little as possible! It's important to travel light. I research subjects before I shoot. I talk to other photographers, and determine what's the smallest amount of equipment I can bring and still get the shot. When I go out, it's often for a specific image that I've previsualized, and I know exactly what gear I need to get it. For outings that don't have a specific subject, I travel with a wide-angle zoom, a 100mm macro, a 70–200mm f/2.8, and a 400mm or 500mm tele, plus a 1.4X teleconverter and tripod. My backpack usually weighs a little over 30 pounds, including DSLRs.

What's your typical workflow?

My only issue with digital is the amount of work it requires in the field. In the film days, I would go back to the camp or the hotel after shooting all day, and enjoy a bottle

CONTINUED ON PAGE 110

Choosing the right lab can make all the difference.

Professional Prints

Lab corrected photographic prints on Kodak® Endura professional paper.

Lab Corrected
8x10
only $1.49

Lab Corrected
11x14
only $3.99

Stop worrying about how your images will print. Our lab corrected workflow is the easiest route to great looking prints. Our technicians view each image individually, making precise adjustments to color, density, and contrast.

Prints on Kodak® Endura® professional paper.					
4x6	.29	10x10	2.49	16x20	13.50
5x7	.99	11x14	3.99	20x30	19.99
8x10	1.49	10x20	4.99	30x40	49.99

This table is just a small sample. We offer over 80 print sizes, from wallet all the way up to **30"x120"**.

Professional Mounting and Finishing Options

All of the finishing options you expect to find in a professional lab serving some of the most successful photographers in the country.

Big16x20
Canvas Gallery Wrap
1-1/2" thickness.
$79.00
on Kodak Endura® professional paper.

Canvas Gallery Wraps

Available in 1½ and 2½ inch depths, printed on Kodak® Endura or Metallic, paper in sizes from 8x10 to 24x30. Ready to hang with mounting hardware and backing paper.

- Mounting on 9 different sub-strates, including mount board, gatorfoam, masonite, and stand-outs.
- Canvas on mount board, masonite and stretcher frame.
- Nine different print textures.
- Luster or glossy print coatings.
- Glossy or matte lamination.

Great Prints. Great Prices. Easy Ordering. It's that Simple.

meridian
Professional Imaging

www.meridianpro.com | 800-544-1370

571 FR/FOTOLIA.COM (DESERT); CHRISTOPHER MEDER/FOTOLIA.COM (FOREST); GALYNA ANDRUSHKO/FOTOLIA.COM (SNOW)

ALL-WEATHER GEAR

When it's hot and dry, freezing cold, or pouring rain, you'll need specialized equipment to make it through the shoot with your gear intact. From silica gel to a waterproof backpack to snowshoes for your tripod, here are the accessories that will keep your stuff safe no matter what the weather brings.

By Jeff Wignall

HOT

SILICA GEL PACKETS

Most cameras are shipped with silica gel desiccant packets, but most of us toss them away. Don't. They absorb up to 40-percent of their weight in moisture, useful in hot, humid climes. **From $9 for a 20-pack of 1-gram packs; www.silicagelpackets.com**

DELORME EARTHMATE PN-60W SE WITH SPOT SATELLITE COMMUNICATOR

Intense heat can disorient on wilderness trips, but this handheld combo GPS and satellite communicator will bring you home safely—even if you're beyond cell range. Operates in humidity levels over 90-percent and in temps up to 167° F. And friends can even track you on Google maps. **$700, street; www.delorme.com**

TRAVEL LITE FISHING VEST
Typical photo vests can get sweaty, so take an idea from the fishing community: the Travel Lite Fly Fishing Vest from Aqua Design. Made from quick-drying, brushed-nylon mesh and weighing only 7.1 ounces, it also has lots of pockets. **$50, street; www.aquadesign.com**

GIOTTOS COCO-AIR BLOWERS
Hot and dry environments bring dust—no good for gear. Giottos CoCo-Air Blowers are a great low-tech solution. The adjustable air nozzle lets you aim the flow, and a blow-back valve prevents them from sucking up the dust. **$13, street; www.giottos.com**

IGLOO PLAYMATE MAXCOLD SOFT COOLER
Cameras hate high heat, so try swapping your shoulder bag for the soft-sided Igloo Maxcold cooler. It will hold your DSLR and a few lenses, and it has a neat internal lid compartment for extras. **$20, street; www.igloo-store.com**

EXTECH 44550 POCKET HUMIDITY/ TEMPERATURE PEN

The Extech 44550 Pocket Humidity/Temperature Pen will tell you exactly how hot and humid it is—it has a temperature range of 14 to 122° F and a relative humidity range of 20 to 90 percent. **$33, street; www.calright.com**

PHOTOFLEX TRANSLUCENT LITEDISC

Too much sun is a bad thing. These diffusers, available in sizes from 12-inch (great for macro work) to 52-inch (for close-up portraits), soften shadows and reduce specular highlights on days with too-contrasty light. **$15–$68, street; www.photoflex.com**

LENSCOAT LEGCOAT TRIPOD LEG COVERS

The last thing you want is a scorching burn from a sunbaked metal tripod leg. One solution: Wrap your tripod legs in LegCoat Tripod Leg Covers. Made of close-cell foam, they feature Velco fasteners for quick installation. **$35–$55, street, depending on size; www.lenscoat.com**

WET

PELICAN MICRO CASES

You can't beat a big Pelican case for keeping lots of gear clean and dry—and these micro models do the same for smaller stuff, such as compact cameras and cell phones. Watertight (no diving, but several models are safe at 3.3-foot submersion for 30 minutes), dustproof, and crushproof, they have clear lids for seeing what's inside.
$8–$37, depending on size; www.pelican-case.com

BRNO DRI+CAP SYSTEM

It's important to keep your gear at a constant, safe, relative humidity level (35- to 40-percent), and the BRNO dri+Cap protective dehumidifying lens cap system can help. Its color-indicating silica packs attach directly to your camera body and lenses using special caps. Available for Canon and Nikon bodies and lenses.
$55, street; www.hpmarketingcorp.com

AQUATECH SPORTS SHIELD
These soft one-piece 100-percent waterproof rain shields protect your camera and lens from all the nasty elements. An adjustable rubber seal wraps around the front of the lens, and a waterproof sleeve provides complete access to camera controls.
$72–$230, depending on camera and lens size; www.aquatech.net

LARGE BUBBLE UMBRELLA
Clear umbrellas let you continue to watch the action while keeping you and your gear dry. The Large Bubble Umbrella provides a 36-inch diameter haven and has a metal shaft.
$34, street; www.umbrellastand.com

SHAMWOW
Vince the ShamWow guy may drive you nuts with his infomercials, but the chamois-like cloth he's hawking really works for drying wet gear. It holds 12 times its weight in water and is easily snipped to custom sizes.
$20 for four; www.shamwow.com

NIKON FOG ELIMINATOR CLOTHS

In humid and damp weather, your lenses and filters will probably gather condensation. To prevent it, wipe with Nikon's Fog Eliminator Cloths. The individually wrapped, reusable cloths prevent moisture from gathering on glass and camera surfaces.

$4.50, street, for a pack of three; www.nikonusa.com

OPTECH RAINSLEEVE

These pocket-size camera rain hoods sport an eyepiece that adapts to viewfinders so you view through the glass, not the bag. Drawstring around front lens element lets you seal out the weather.
$7, street, for two; www.optechusa.com

GEPE CARD SAFE EXTREME

Memory cards and water shouldn't mix, but these hard-shell wallets can protect them: They're crushproof, dustproof, and watertight—and they float.
$17, street; www.gepe.com

HPRC 3500E WATERPROOF BACKPACK

Falling in a river or getting drenched in a raging rain would spell doom with most backpacks, but with this hard-shell resin pack, your stuff will stay safe and dry. Crushproof and light, it handles extreme temps, too: –40˚F to 175˚F. Weighs 6.6 pounds empty (7.82 with foam).
$292, street, without insert; www.plaber.com

COLD

PENTAX K-5

The Pentax K-5 DSLR was born for handling extreme cold. Pentax says this 16.3MP all-weather camera (tested on page 71) is "fully weathersealed" against cold and resists water, fog, snow, sand, dust, and more. It's got a tough frame, too: a magnesium-alloy body wrapped around a stainless steel chassis. **$1,500, street; www.pentaximaging.com**

MR. HEATER PORTABLE BUDDY HEATER

No need to sit in a frigid blind while you wait for a wildlife subject: Warm up with Mr. Heater. Powered by 1-lb propane tanks, it has two output options—4,000 or 9,000 BTUs—for up to 6 hours of warmth. Also has automatic low-oxygen and tip-over safety shut-off features. **$100, street; www.cabelas.com**

EVEREST DESIGNS GLOMITT CONVERTIBLE MITTENS

Both glove and mitten, these let you operate camera controls while keeping all but your fingertips toasty. Made by a women's cooperative in Nepal in sight of Mount Everest. **$15, street; www.rei.com**

GOPRO HD HELMET HERO

For shooting while skiing, GoPro's 1080p HD Helmet HERO will capture your adventures. It can record up to 2.5 hours of video on a single charge or shoot 5MP stills at 60-sec intervals automatically. **$299, street; www.goprocamera.com**

HAND WARMERS

Chemical hand warmers are good for other things, too. Says Alaskan photographer Ron Niebrugge, "I keep an extra battery in my pocket with a warmer and then rotate as needed." Extreme cold? He suggests securing one to the base of your camera with a rubber band. **$10, street for a bag of 10; www.warmers.com**

ENERGIZER ULTIMATE LITHIUM BATTERIES

Non-rechargeable lithium batteries handle cold best. Energizer claims its cells last up to eight times longer than others, have a 15-year storage life, and operate down to -40°F. **$7, street, for four AAs; www.energizer.com**

MANFROTTO 230 ALL WEATHER TRIPOD SNOWSHOES

Your feet sink into the snow—why wouldn't your tripod's? These universal pads clamp on to your tripod legs and, in snow or sand, prevent your camera support from heading south on you. Package of three (good for one tripod or three monopods). **$20, street; www.manfrotto.com**

1&1® WEB HOSTING

PROFESSIONAL WEBSITES

Get more features for less with the world's largest web host!

Domains Included
All hosting packages include domains, free for the life of your package.

Unlimited Traffic
Have as many visitors to your website as you want - no extra charges!

Mobile Software
Optimize your website to be viewed on mobile devices.

Online Marketing Tools
Your website will automatically be submitted to major search engines.

Green Data Centers
We're committed to hosting your site with a minimal impact on the environment.

1&1® HOSTING PACKAGES

6 MONTHS FREE!*

HURRY – OFFER ENDS 2/28/2011!

1&1® HOME PACKAGE:

- 2 Included Domains
- Private Domain Registration
- 150 GB Web Space
- UNLIMITED Traffic
- 1,500 E-mail Accounts
- Site Building Tools
- Paid search advertising credit with Google™ AdWords, Yahoo!® Search Marketing, and Citysearch®
- 24/7 Toll-free Customer Support

~~$6.99 per month*~~

Need more domains?
.info domain only $0.99 first year*
.com domain only $4.99 first year*

More special offers available on our website!

1&1®

MEMBER OF united internet

Get started today, call 1-877-GO-1AND1 **www.1and1.com**

*Offers valid through 2/28/2011. 12 month minimum contract term applies for web hosting offers. Setup fee and other terms and conditions may apply. Domain offers valid first year only. After first year, standard pricing applies. Visit www.1and1.com for full promotional offer details. Program and pricing specifications and availability subject to change without notice. 1&1 and the 1&1 logo are trademarks of 1&1 Internet AG, all other trademarks are the property of their respective owners. © 2011 1&1 Internet, Inc. All rights reserved.

FOBA®

MODUL-TECHNOLOGY

SUPERBALL M-2

The FOBA Superball M-2 is a Swiss-made professional ball head manufactured to the highest possible quality standards. The M-2 is designed for years of tough everyday use in the studio or in the field. It provides a strong clamping force for absolutely rigid camera locking, and will easily support professional camera systems up to 26 pounds. A panning base with a separate lock allows for easy and fast positioning, and the ball head allows for effortless transition between vertical and horizontal shooting.

FOBA FOR LIFE

Investing in FOBA equipment means investing well. The precision components are very sturdy and almost maintenance-free. FOBA products are designed to last a lifetime.

CEILING RAILS

COMBITUBE

SHOOTING TABLES

STUDIO STANDS

BALL HEADS

3D TURNTABLES

www.bronimaging.com 908-754-5800

LAB

AUTHORITATIVE TESTS, REVIEWS, AND BUYING ADVICE

DSLR TEST

PUMPED-UP PENTAX

This rugged new DSLR is tough—and tough to beat

WITH NEW YORK City pummeled by multiple snowstorms this winter, our staff was happy to have the Pentax K-5 around. Fully weathersealed and built to function in temperatures as low as 14 degrees Fahrenheit, Pentax's new flagship DSLR ($1,470, body only; $1,580, with 18–55mm f/3.5–5.6 WR lens) didn't even flinch as foot after foot of snow covered our metropolis. And given the image quality that the K-5 delivers, we were just as pleased when reviewing our images after we came in from the cold.

In the Lab

Helped by a new 16.3MP CMOS sensor that captures RAW images with 14 bits per color channel, the K-5 earned an Excellent rating in the Popular Photography Test Lab from its lowest sensitivity of ISO 80 through ISO 400—the first Pentax DSLR to do so under

PENTAX K-5

16.3MP CMOS APS-C sensor
1080p 25-fps HD video
Live-view shooting
$1,580, with 18–55mm f/3.5–5.6 WR lens

The locking mode dial on top keeps the K-5 from changing modes accidentally.

TONY CORDOZA

The K-5 is a worthy upgrade from the K-7 or any other Pentax DSLR.

our latest, and most stringent, test criteria. In our resolution test, the camera served up 2590 lines per picture height for an Excellent rating, a solid showing for a 16MP sensor.

Color accuracy also got an Excellent rating, with an average Delta E of 7.1. This marks an improvement over this camera's predecessor, the K-7, which didn't make it past the Extremely High mark in this test. In this test, the K-5 essentially matches the Olympus E-5, its only real competitor in this class of camera, which is to say more expensive than the Canon EOS 60D or Nikon D7000, but less expensive than the Canon 7D or Nikon D300s.

Noise can be a controversial topic when it comes to Pentax's high-end cameras. The company chooses to tread extremely lightly with noise reduction, which means that its cameras end up with higher noise numbers than they would if the engineers were a bit more aggressive in this area. Pentax does apply an increasing amount of color noise reduction as ISO increases, but not luminance noise reduction.

That said, the K-5 keeps noise to a Low or better rating up to ISO 400. It remains in acceptable territory up to ISO 1600 and just barely edges into an Unacceptable rating at ISO 3200. Even a judicious use of noise reduction will bring that into our acceptable range without a serious effect on resolution, which remains at an Excellent rating up to ISO 12,800 using Pentax's default noise-reduction

PENTAX K-5

WHAT'S HOT

Weathersealed body; excellent image quality.

WHAT'S NOT

Sluggish low-light AF; noisy at high ISOs.

WHO IT'S FOR

Budget-minded advanced photographers.

Shooters who want a very rugged DSLR.

PHILIP RYAN (LCD IMAGE)

settings. And if you're willing to sacrifice an appreciable amount of resolving power, you can likely bring noise into acceptable territory at ISO 6400.

Considering that the Olympus E-5 resolved only 2270 lines at its best, when you balance resolution and noise reduction, the K-5 earns a slight edge over its main competitor—as long as you're willing to experiment a little and find the amount of noise reduction that's right for you. Also, while sensitivity on the Olympus tops out at ISO 6400, the Pentax keeps going up to ISO 51,200, with 1/3-EV increments all the way to the top.

Fast in bright light, though sluggish in low light, the K-5 showed a slight improvement over the K-7 in our autofocus speed test, but this remains one of the drawbacks of Pentax's top DSLR. Of course, the same can be said for Olympus, though the E-5 fared slightly better at moderate light levels, while the Pentax beats it in the dimmest light.

Both cameras are extremely fast in bright light. In fact, in the brightest level of our test, the K-5 focused in 0.28 sec, exactly matching the E-5's result. Both cameras stepped down to 0.48 sec in nearly identical increments by EV 6, which is about the light level of a well-lit kitchen. At this point the K-5 takes a big drop to 0.80 sec at EV 4, while the E-5 focused in 0.56 second. By EV 1, both cameras focus in just under a second, while at the moonlit dark of EV 0, the Pentax focused in 1.17 sec, while the Olympus dropped to 1.32 sec. One thing the Olympus has in its favor: It was able to focus reliably, albeit very slowly, at our test's lowest light level of EV –2, while the Pentax couldn't focus in such dim light (Pentax rates the K-5's AF as functional only down to EV –1).

While we were pleased with the overall look of the 1080p 25-fps HD video we shot with the K-5, we wish Pentax would adopt the 24-fps industry-standard frame rate.

In the Field

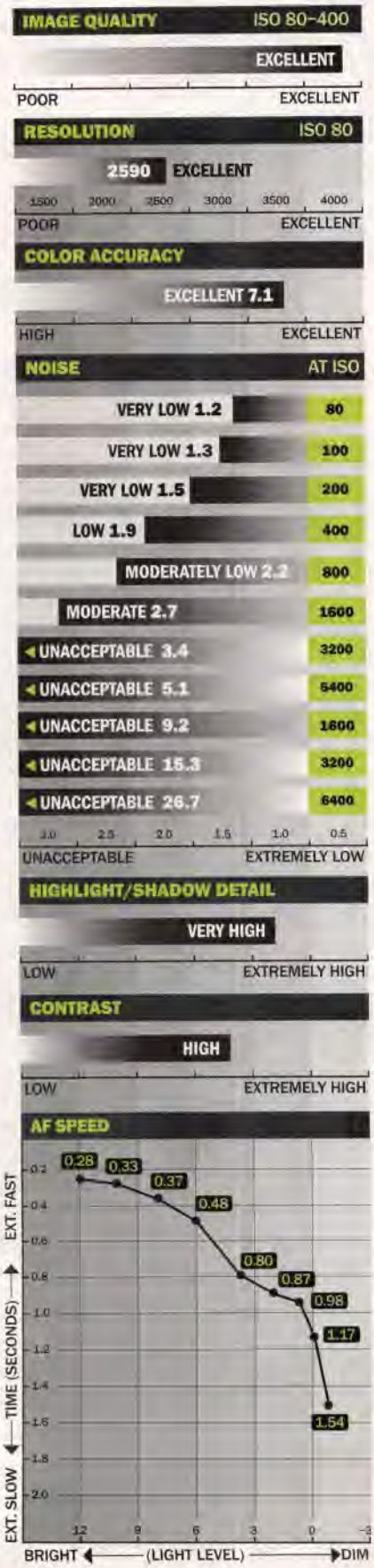
The operable word when describing the K-5's body is rugged. A steel chassis is wrapped in a magnesium-alloy shell, and ample gaskets and O-rings keep out moisture, dust, and other particles. We shot with the K-5 and a weathersealed DA* 16–50mm f/2.8 ED AL (IF) SDM lens in the freezing cold of a snowstorm, and encountered no problems. The outer shell is clad in very grippable rubber and contoured into a very solid design that feels like it has always belonged in your hand.

The front command wheel (one of two), in front of the shutter button, is angled upward to make it easier for you to make quick adjustments between shots. While the rear command wheel isn't quite as fancy as the ones on Canon's higher-end cameras, it is well located, a good distance from your thumb yet easy to reach when you need it.

The most important settings, such as AF, metering, ISO, exposure compensation, and more, are accessible through hard buttons, including an array of five that double as menu navigation controls. The main menus are uncomplicated and well laid out; they include 27 custom settings.

Accessed through the Info button, the quick menu provides a second way to reach those essential controls that are on the buttons. It also lets you adjust other commonly accessed functions, such as the camera's sensor-shift image stabilization, which works with nearly any lens you mount on the camera. In our test, done with a DA 50–200mm f/4–5.6 zoomed

TEST RESULTS



SLIK
PROFESSIONAL
Durable, Affordable

PRO 780 DX
Max Height: 76.80 in.
Max Load: 15.00 lbs.
Weight: 6.95 lbs.
SUPER A.M.T. ALLOY

PRO 500 HD
Max Height: 64.9 in.
Max Load: 11.0 lbs.
Weight: 5.91 lbs.
SUPER A.M.T. ALLOY

SLIK Super A.M.T. alloy uses a mixture of Aluminum, Magnesium and Titanium.

The NEW SLIK PRO 780 DX tripod uses the widely popular PRO 700 DX legs in black color, coupled with a new SH-807E heavier duty 3-Way pan head.

The NEW SLIK PRO 500 HD Tripod with new Hybrid SH-736HD Fluid-Effect pad head was created for use with DSLR's that have HD video capability.

EXCLUSIVE DISTRIBUTION BY:
THK PHOTO PRODUCTS, INC.
Tokina • HOYA • Kenko • SLIK
7642 Woodwind Drive, Huntington Beach, CA 92647
Visit our website for more information at
www.thkphoto.com

to 200mm, our testers got an average of 2.5 stops of shutter speed leeway with image stabilization turned on.

Live-view shooting uses a reasonably fast contrast AF, which zooms in on your subject while focusing. HD video yielded sharp footage with accurate-looking colors.

Burst shooters should perk up when they hear that the K-5 is able to shoot up to 30 full-sized, highest-quality JPEGs at a blazing 7 frames per second in a single burst. And, while it was only capable of 8 RAW shots at 7 fps when it was introduced, a recent firmware upgrade—which also enabled the use of SDXC cards—raised that to approximately 20 RAW shots, according to Pentax. In our test, we got 19 RAW shots using a SanDisk Extreme SDHC Class 10 card.

The Bottom Line

If you're a Pentax owner looking to step up, the K-5 is a worthy upgrade from the K-7 or any other Pentax DSLR. You'll get a noticeable amount of added resolving power, at least an extra stop of usable ISO, and if you don't mind noise, sensitivity up to ISO 51,200. Plus, the burst rate has been ratcheted up, to 7 fps over the K-7's 5.2 fps.

If you're looking to enter the DSLR world with a rugged model such as this, the K-5 offers one of the most economical ways to do so. It costs less than the E-5, as well as Canon and Nikon models that don't quite match this level of toughness.

Another consideration is lenses. While Olympus glass is top-notch, Pentax equivalents tend to cost quite a bit less. Plus, Pentax offers an array of beautiful prime lenses in its Limited series. Combine all of this with the fact that this camera offers more resolution and faster bursts, and it looks like the K-5 is a champ. —*Philip Ryan*

SPECIFICATIONS

IMAGING: 16.3MP effective APS-C sized CMOS sensor captures images at 4928x3264 pixels with 14 bits/color in RAW.

STORAGE: SD/SDHC/SDXC stores JPEG, PEF or DNG RAW, and RAW + JPEG files.

VIDEO: Up to 1920x1080p, 25 fps or 1280x720p, 30 fps, AVI Motion JPEG format files; built-in mono mic, stereo mic input, contrast-detection AF.

BURST RATE: Full-sized JPEGS (Premium mode), up to 30 shots at 7 fps; RAW (14-bit), up to 20 shots at 7 fps.

AF SYSTEM: TTL phase detection with 11 illuminated focus points (9 cross-type); single-shot and continuous AF with subject tracking. Tested sensitivity down to EV –1 (at ISO 100, f/1.4).

LIVE VIEW AF: TTL contrast detection.

SHUTTER SPEEDS: 1/8000 to 30 sec, plus B (1/3-EV increments); 100,000-cycle rating.

METERING: TTL metering with 77-segment evaluative, centerweighted, and spot approx. 5% of frame), EV 0–22 (ISO 100, 50mm f/1.4).

ISO RANGE: ISO 100–12,800 (in 1/3-EV increments), expandable to ISO 80–51,200 (in 1/3-EV increments).

FLASH: Built-in pop-up with P-TTL autoflash, GN 43 (ISO 100, feet); wireless flash control of off-camera units; flash sync to 1/180 sec.

VIEWFINDER: Fixed eye-level pentaprism.

LCD: 3-inch TFT with 921,000-dot resolution.

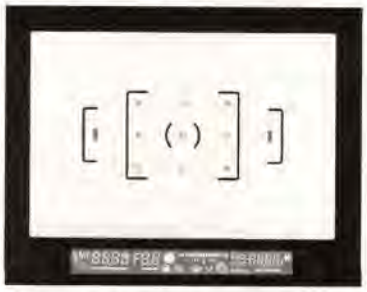
OUTPUT: Hi-Speed USB 2.0, HDMI video, composite video.

BATTERY: Rechargeable D-LI90 Li-ion, CIPA rating 740 shots.

SIZE/WEIGHT: 5.2x3.8x2.9 in., 1.6 lb. with SD card and battery.

STREET PRICE: $1,470, body only; $1,580, with DA 18–55mm f/3.5–5.6 AL WR lens.

INFO: pentaximaging.com



VIEWFINDER TEST: Accuracy, 100% (Excellent); Magnification, 0.92X (Excellent).

RAW STEEL™
Steel Plated SDHC Card:
Lifetime Warranty
Ruggedized
RAW STEEL
16GB
RAW STEEL is designed to withstand the rigors of high performance photography/videography. New, miniature, chip on board technology, allows extra room for a reinforced internal housing structure. The Epoxy assembly process and steel plating adds great strength, while making RAW STEEL waterproof too. RAW STEEL surpasses speed class 10 specs.
Ruggedized in USA

HoodLoupe™ 3.0 for glare free LCD viewing

Checking your histogram, composition and focus outdoors is easy with Hoodman's HoodLoupe 3.0. Precise 1X German Glass Optics deliver a ± 3 diopter adjustment. HoodLoupe 3.0 is encased in user friendly rubber and fits 3 inch or smaller LCD screens. Comfortable neck lanyard and compact storage case included.

PATENT US 7,386,229 B2 and 7,034,877

HoodEYE™ Digital Camera Eyecup

HoodEYE™ links eye to camera for improved viewfinder optics. Easily upgrade your camera eyepiece in seconds. Five models all Canon and Nikon Digital SLR cameras (excluding D5000). Patented self locking mount system keeps HoodEYE™ securely in place.

PATENT US 7,831,142 B2

Titanium

PhotoFrames™

Glasses built for photographers

Add your R_x lenses

Frame relief for Photographers who wear glasses

Hoodman Titanium PhotoFrames are glasses built for photographers. Each lens moves independently so that you can move lens up for shooting eye and leave lens down for tracking eye. Titanium memory wire technology makes PhotoFrames strong and durable. Comfortable wrap around ear pieces ensure PhotoFrames ride securely with photographers through action sequences. PhotoFrames come with clear glass templates installed to guide your Optometrist's efforts for easy fitting of your Rx lenses.

Inspired Photography Tools™

www.HoodmanUSA.com 800.818.3946

check our website or call for up-to-the-minute prices & information! email your order or inquiry to us at: sales@beachcamera.com

BEACH CAMERA®

Where the Customer Always Comes First

1-800-634-1811

Toll-free Customer Service 800-634-1811 Dial 2
or email us at CS@beachcamera.com
Retail Showroom: **732-968-6400**
203 Route 22 East Green Brook, NJ 08812

Sunday 10:00am-6:00pm Mon-Thurs 9:30am-7:00pm Friday 9:30am-2:00pm

All products are brand new, factory fresh and include USA warranty!

www.beachcamera.com

2010

Digital Photography

Nikon Authorized Dealer

all Nikon products include full Nikon USA warranty!

COOLPIX L22 *At the heart of the image.*

Make Memories. Share Joy.

The COOLPIX L22 is the ideal camera for consumers who are looking to easily capture all of life's memories at an affordable price, but without compromising performance. The COOLPIX L22 features 12-megapixel resolution for stunning image detail, a 3.6x Zoom-NIKKOR lens for creative compositional freedom, ISO up to 1600 capability helps give you sharper results when shooting in low light or capturing fast-moving subjects. The COOLPIX L22 sports a huge bright 3.0-inch 230,000-dot LCD screen with a wide-viewing angle and anti-glare coating; 3-way VR Image Stabilization System; Smart Portrait System; Easy Auto Mode and more.
Nikon, Inc. limited warranty included 2010 Nikon Inc.

COOLPIX P7000 NEW!

High Performance. Creative Control. Outstanding Images

The Nikon COOLPIX P7000 is a compact, high-performance camera featuring a 10MP large 1/1.7-inch CCD sensor 7.1x Wide-Angle Optical Zoom, HD (720p) Movie with Stereo, Mic Input Jack and HDMI Output. And a host of other features. The P7000 is designed for no-limits shooting handling low-light or tricky light, fast-moving subjects, dramatic landscapes and detailed close-ups with ease.
Nikon, Inc. limited warranty included 2010 Nikon Inc.

COOLPIX S4000

A Beautiful Touch on Picture Taking

The COOLPIX S4000 is equipped with a high-resolution 3-in., 460k-dot touch panel TFT LCD monitor that offers intuitive operation. Monitor visibility has been increased for clear display of more details. Practical operational controls, new touch panel functions including touch shutter and slider adjustment of white balance are also included.
Nikon, Inc. limited warranty included 2010 Nikon Inc.

D3100

Beautiful Pictures. Amazing Movies. Incredibly Easy.

The 14.2-megapixel D3100 has powerful features, such as the enhanced Guide Mode that makes it easy to unleash creative potential and capture memories with still images and full HD video. It is also the world's first D-SLR to introduce full time auto focus (AF) in Live View and D-Movie mode to effortlessly achieve the critical focus needed when shooting Full HD 1080p video.
Nikon, Inc. limited warranty included 2010 Nikon Inc.

D5000 *Smart. Sharp. Simply Brilliant*

The D5000 12MP DSLR Camera expands possibilities for photo and HD Video creativity with D-Movie mode. Vari-Angle LCD Monitor & 19 Automatic Scene Modes. It also incorporates a comprehensive set of in-camera editing features to make the most of captured images without the need of a computer.
Nikon, Inc. limited warranty included 2010 Nikon Inc.

D7000 NEW!

Power to Astonish. Features to Inspire

The D7000 Offers Creative Freedom with Advanced Features Such as a New 16.2-Megapixel DX-Format CMOS Sensor, Six FPS Shooting, and more. The new EXPEED 2 TM image-processing engine fuels the enhanced performance of the D7000 along with a new 39-point AF system and groundbreaking new 2,016 pixel RGB 3D Matrix Metering System to deliver amazing image quality in a variety of shooting conditions. Additionally, the D7000 D-SLR provides full 1080p HD movie capability with full-time auto focus (AF)Images.
Nikon, Inc. limited warranty included 2010 Nikon Inc.

CALL OR LOG ONTO WWW.BEACHCAMERA.COM FOR UP-TO-THE MINUTE REBATES, PRICING AND CURRENT PROMOTIONS.

Digital SLR's

Canon

EOS 60D

The Journey Continues

The EOS 60D DSLR features an improved APS-C sized 18MP CMOS sensor, a new DIGIC 4 Image Processor for finer detail and excellent color reproduction, and improved ISO capabilities from 100 - 6400 (expandable to 12800) for uncompromised shooting even in the dimmest situations. The new Multi-control Dial enables users to conveniently operate menus and enter settings with a simple touch.

OLYMPUS

PEN E-PL1

Powerfully Simple

The new Olympus PEN E-PL1 is truly greater than the sum of its parts. This surprisingly small camera body is packed with technology normally found in bigger, bulkier cameras and High Definition (HD) camcorders. With features like interchangeable lenses, the new Live Guide and one-touch HD video - the E-PL1 is an easy-to-use and portable all-in-one package that travels with you to capture all the details of your life.

PENTAX

K-r NEW!

Brilliantly Colorful

The colorful PENTAX K-r DSLR camera offers advanced yet simple to use features at an attractive price. It is easy to use with Auto Picture, Scene, and Custom Image Processing modes that take the guesswork out of shooting stunning images while still offering a high degree of manual and priority control. The K-r offers a variety of new and improved features including a fast framerate, high ISO sensitivity, 3-inch LCD, responsive autofocus, an improved 12.4 megapixel low-noise sensor and widescreen HD video capture that take it a step above an entry-level DSLR camera.

TAMRON

AF18-270mm F/3.5-6.3 Di II VC (Vibration Compensation) LD Aspherical (IF) Macro

The Longest Steadiest Lens on Earth

The AF 18-270 covers an angle of view equivalent to that of a 28mm wideangle to a 419mm ultra telephoto with just one lens, letting the user capture once-in-the-lifetime images of panoramic landscape images or close-up pictures of children smiling, without having to get too close to the subject and without having to change lenses.

Camcorders

Canon ImageANYWARE

THE OFFICIAL CAMCORDER OF Life

Vixia HF M300

A brilliant blend of capability and convenience.

Canon's VIXIA HF M300 Flash Memory Camcorder records directly to an SD memory card. A Genuine Canon 15x HD Video Lens and 3.89-megapixel Full HD CMOS Image Sensor help to deliver high definition video and 3.3 MP photos with incredible detail and lifelike color. Smart Auto "reads" the visual components of the scene you're shooting and chooses the best settings. Touch & Track allows you to achieve sharp focus and precise exposure for any subject, simply by touching the 2.7" Touch Panel LCD.

Vixia HF R11

HD Dual Flash Memory Camcorder

With the Canon VIXIA HF R11 Dual Flash Memory Camcorder, you'll find that high definition video has hit new levels of convenience, ease, performance- and value. The VIXIA HF R11 has a 32GB internal flash drive, together with an SD memory card slot, Canon's Relay Recording and Smart Auto. A Genuine Canon 20x HD Video Lens and Dynamic IS works in combination with Canon's sophisticated HD image processing to deliver the sharp, vivid, lifelike video you want to see on your HDTV. Advanced Video Snapshot lets you create 2-, 4- or 8-second movie clips, with music, that are perfect for sharing.

FS300

Fast, Flexible, Flash Memory

Adding to the usefulness of the Canon F300 flash memory camcorder is Quick Charge - which reduces the recharge time for the FS300's battery and Pre-Record which gives you a head start on capturing the action. With the FS300's Canon Exclusive features such as Canon 41x Advanced Zoom and DIGIC DV II Image Processor, combined with a 2.7" Widescreen LCD, Quick Charge and our new Dynamic IS - you've got a flash memory camcorder that's both hard to beat and unmistakably Canon.

Vixia HF S200

Shoot. Capture. See. Be HD.

Canon's VIXIA HF S200 Flash Memory Camcorder, with two SD memory card slots, offers Canon's most sophisticated feature set to date - blurring the line between consumer and professional. Canon's superlative proprietary imaging technologies help deliver video and 8.0 megapixel photos with incredible detail and lifelike color. Touch & Track allows you to achieve sharp focus and precise exposure for any subject, simply by touching the generous 3.5 inch High Resolution (922,000 dot) Touch Panel LCD. Native 24p Mode perfectly matches the frame rate of film.

We carry Cameras, Digital Cameras, Camcorders, VCR's, DVD's, Audio, Printers, Scanners, PDA's and more

From: Canon Nikon SAMSUNG OLYMPUS SONY FUJI Kodak PENTAX HEWLETT PACKARD JVC Panasonic SHARP palm CASIO TAMRON LOWRANCE EPSON Pioneer DANE-ELEC GARMIN TOSHIBA iRiver bogen PINNACLE MAGELLAN SANYO tomtom

Corporate, School and Government purchase orders accepted! Fax to: (732) 424-5136

Corporate, School and Government purchase orders accepted! Fax to: (732) 424-5136

AMATEUR PRO

Mega Micro

PANASONIC'S LATEST FLAGSHIP ILC TOUCHES ON GREATNESS

WHILE CERTAINLY not the smallest of Micro Four Thirds models, Panasonic's GH series represents the state of the art for this still-young camera format. This latest, the Lumix DMC-GH2, brings the interchangeable-lens compact to a higher level than ever before, with a 16.05MP sensor, a gorgeous 1.5-million-dot electronic viewfinder, and a 3-inch 460,000-dot articulated LCD touchscreen. Video and autofocus have been upgraded over its predecessor, and the body is packaged with a 14–140mm f/4–5.8 lens ($1,500, street, for the kit) that might be the only optic some users will ever need—though we'd want something faster. Most notable, though, is the GH2's performance in the Popular Photography Test Lab: It's the first ILC to achieve an Excellent overall image quality rating in our tests.

In the Test Lab

Employing a Four Thirds Live MOS sensor (with 2X lens factor), the GH2 earned that Excellent rating from its lowest sensitivity setting of ISO 160 through ISO 400, due largely to its very impressive resolution of 2630 lines per picture height at ISO 160. Its resolving power remained in the Excellent range through ISO 3200, where it managed

PHILIP RYAN (LCD IMAGE)

PANASONIC LUMIX DMC-GH2
WHAT'S HOT
Excellent image quality; touchscreen controls.
WHAT'S NOT
Very noisy at higher ISOs.
WHO IT'S FOR
Photographers who want interchangeable lenses, but not the bulk of a DSLR.

2580 lines. Even at its top sensitivity of ISO 12,800, where the noise achieved blizzard-like conditions, it produced 2300 lines of resolution, good enough for an Extremely High rating on our scale.

Color accuracy is another area where the GH2 excels: The camera scored an Excellent rating with an average Delta E of only 6.6—well below our cutoff of 8 for top honors in this test.

The GH2 did fairly well in noise suppression at its lower ISOs, dipping into our lowest (i.e., best) rating of Extremely Low at ISO 160. Noise remained in the acceptable range up to ISO 800, but with Unacceptable ratings from ISO 1600 though ISO 12,800, we were not very impressed with the GH2's performance in this area.

While it fares better here than compact cameras, most entry-level DSLRs can keep noise to acceptable levels at least through ISO 1600. Given this camera's size, though, and the difficulty with heat control that comes with that, Panasonic deserves credit for the imaging power it has built into the GH2.

All the switches and dials atop the GH2 let you control more from the top of this camera than you can on some DSLRs. Plus, three custom shooting modes make it easy to share the camera among family members.

In the Field

Like the G2 and the GH1 before it, the GH2's body resembles a tiny DSLR, though not nearly as deep. The construction feels tough, but it's not weathersealed, as are some higher-end DSLRs.

The grip, while small, offers as much to hold onto as most entry-level DSLRs or superzoom compacts. It's also covered in textured rubber, as is a small area on the back for your thumb. A small ridge here provides leverage and keeps your thumb from accidentally pressing the rear click wheel.

Almost every available surface on the GH2 has some sort of control button, wheel, dial, or switch. Every major function can be accessed through one of these controls, so you won't find yourself digging through menus to find something.

The only exception might be image stabilization, depending on the lens you use. The 14–140mm f/4–5.8 kit lens has a switch on its barrel to turn IS on and off, though some of Panasonic's lenses, notably the G2's kit lens, don't have such a

The GH2 keeps Panasonic at the forefront of the Micro Four Thirds format and ILCs in general.

TEST RESULTS

IMAGE QUALITY ISO 160–400

EXCELLENT

POOR — EXCELLENT

RESOLUTION ISO 100

2630 VERY HIGH

1500 2000 2500 3000 3500 4000

POOR — EXCELLENT

COLOR ACCURACY

EXCELLENT 6.6

HIGH — EXCELLENT

NOISE AT ISO

EXTREMELY LOW 1.1	160
VERY LOW 1.2	200
VERY LOW 1.7	400
MODERATE 2.8	800
◄ UNACCEPTABLE 5.1	1600
◄ UNACCEPTABLE 7.9	3200
◄ UNACCEPTABLE 11.6	6400
◄ UNACCEPTABLE 17.1	12800

3.0 2.5 2.0 1.5 1.0 0.5

UNACCEPTABLE — EXTREMELY LOW

HIGHLIGHT/SHADOW DETAIL

HIGH

LOW — EXTREMELY HIGH

CONTRAST

HIGH

LOW — EXTREMELY HIGH

Turn your used photo equipment into cash!

with Adorama Used Marketplace.

We Pay Top Dollar
for rare pieces & collections

Extra Cash Bonuses
for current models

Easy online quotes
at: adorama.com/sell

We want to buy your used or unused photo equipment!

Adorama spent millions of dollars in 2010 buying 35mm, Medium & Large Format, Scopes, Video and Digital equipment.

Our customers happily traded or cashed in their equipment. We were able to satisfy them by simply **paying above market value.**

Adorama pays **top dollar** for individual items, rare pieces, collections and estates.

3 Small Steps for Giant payouts!

FAST
We can arrange a **FREE** UPS insured pickup in the USA, or you may send it to us at your convenience.

SIMPLE
Expect one of our agents to contact you as soon as your equipment is evaluated.

SMOOTH
Your check, direct deposit or trade will be sent out promptly.

If you are not pleased with our offer, we will return the equipment fully insured at our expense.

To find out the value of your equipment, contact us:

Phone:
800-223-2500

Online Quote:
adorama.com/sell

e-mail:
used@adorama.com
Please include your phone number in the e-mail.

Bring it:
42 West 18th Street
New York NY 10011

Ship it:
Adorama
Att. Used Department
7 Slater Drive
Elizabeth, NJ 07206

Call. 800.223.2500
Logon. adorama.com
Visit. 42 W. 18th St. NYC 10011

ADORAMA
THE PHOTOGRAPHY PEOPLE

switch. That shouldn't pose a major problem, as IS isn't something you typically turn on and off much while shooting.

In addition to three assignable function buttons, there are three custom shooting modes on the mode dial. That's more customization than some entry-level DSLRs, which makes sense, given that the GH2 is priced higher than most of them.

While you'd certainly be able to control any camera function you'd like using the physical controls on the GH2's body, along with minor assists from the menu system, the big deal for this iteration of Panasonic's GH-series cameras is touch-screen control. Much like the system we saw in the G2, the GH2 lets you control many functions and settings through the big, 3-inch, articulated 460,000-dot touchscreen.

For info on how we test cameras, go to PopPhoto.com/reviews.

Selecting a focusing and/or metering point is as simple as touching that part of the frame. With Touch Shutter, you can lit-

SPECIFICATIONS

IMAGING: 16.05MP effective, Four Thirds-sized Live MOS sensor captures images at 4608x3456 pixels with 12 bits/color.

STORAGE: SD, SDHC, and SDXC. Stores JPEG, RW2 RAW, MPO, RAW + JPEG, and MPO + JPEG.

VIDEO: Up to 1920x1080i, 60 fps; 1920x1080p, 24 fps; or 1280x720p, 60 fps AVCHD format; built-in stereo mic with optional mic input; continuous AF.

BURST RATE: Full-sized JPEGs (Fine mode), up to card capacity at 5 fps. RAW, up to 7 shots at 5 fps (12-bit).

AF SYSTEM: TTL contrast detection with 23 focus areas. Single-shot and continuous with face detection and subject tracking.

SHUTTER SPEEDS: 1/4000 to 60 sec, plus B (1/3-EV increments).

METERING: TTL metering using 144-zone Intelligent Multiple (evaluative), centerweighted, and spot. EV 0–18 (f/2, ISO 100 equivalent).

ISO RANGE: ISO 160–12,800 (in 1/3- or 1-EV increments).

FLASH: Built-in pop-up with TTL autoflash, GN 46 (ISO 160, feet); flash sync to 1/160 sec.

EVF: Fixed eye-level LCD with 1,533,600 dot-equivalent resolution. Approximately 100-percent field of view, 0.71X magnification.

LCD: 3-in. articulated TFT touchpanel with 460,000-dot resolution.

OUTPUT: Hi-Speed USB 2.0, mini-HDMI video, composite video.

BATTERY: Rechargeable DMW-BLC12PP Li-ion, CIPA rating 330 shots (with LCD screen) or 340 shots (with EVF) when using 14–42mm f/3.5–5.6 lens; 320 shots (with LCD screen) or 330 shots (with EVF) when using 14–140mm f/4–5.8 lens.

SIZE/WEIGHT: 4.9x3.5x3.0 in., 2.0 lb with 14–140mm kit lens, SD card, and battery.

STREET PRICE: $1,500, with 14–140mm f/4–5.8 lens.

INFO: panasonic.com

erally point and shoot by touching the image of your subject.

Using touch to select your focus point isn't without drawbacks. More than once, we found our focus point in a new location when attempting to shoot after holding the camera at our side. And we also accidentally set off Touch Shutter a number of times. A small soft button on the screen lets you turn Touch Shutter on and off—and we suggest deactivating it when you take a short break from shooting, then reactivating when you start again. After a short period of adjustment, we found Touch Shutter an enjoyable new way to capture snapshots.

But slow shutter speeds, as well as bursts, are typically better controlled with the traditional shutter button, since pressing the screen tends to jostle the camera body too much. And for burst shooting, we also preferred to view through the EVF rather than the LCD. Basically the same finder as in the GH1, it remains the nicest EVF we've used on a consumer-grade camera.

Speaking of bursts, the GH2 can capture up to 5 frames per second, and its tracking autofocus can keep up fairly well with moving subjects, though the initial focus lock might be a tad sluggish in low light. Contrast AF, the type used on all compacts, still can't match a DSLR's phase detection for very demanding tracking or moderate- and low-light AF, but the focusing of the GH2 is among the fastest we've seen yet from contrast detection. And it's significantly faster than the contrast detection you'll find in any DSLR's live-view mode. Only Sony's dual-sensor DSLRs—the A55 and A33 fixed-mirror cameras, which use phase-detection AF in live view—can autofocus faster.

We should note that, while the GH2 doesn't blank out between burst shots as much as some cameras do, it still doesn't offer the smooth viewing experience when panning along with a subject that you can get with a DSLR's optical viewfinder.

Video from the GH2 is very pleasing, and the kit lens is specifically designed to minimize vibration and noise, so you likely won't hear it in the audio the camera records with its built-in stereo microphone. You also have level controls for audio and an input for a stereo mic. So using an external audio pickup, such as a wireless lavaliere, is no problem. The footage itself looks impres-

CONTINUES ON PAGE 100

Giottos: MH1300-657 ballhead with QR, Arca compatible, 2 levels, supports 20 lbs.

Boblbee Aero: ABS laptop backpack, optional photo equipment insert available. Ultimate protection, comfort and style.

Kaiser: Studio-Out-Of-The-Box - perfect for internet photos.

Ansmann: Energy 16 - AA/AAA/C/D/9V charger.

Great Gear,#1.

Linhof: Techno Digital/Roll-Film field camera system. Made in Germany.

Berlebach: low vibration, ash, professional tripods.

HP Marketing Corp.
Performance and value.
973/808-9010 For dealer list, visit www.hpmarketingcorp.com

AMATEUR PRO

Priced Right

PENTAX ADDS ANOTHER NORMAL

SCALING UP to an equivalent 52.5mm normal focal length on Pentax's DSLR bodies, with their APS-C-sized sensors, the Pentax 35mm f/2.8 macro lens tested here exactly a year ago had a lot going for it. So why introduce this new 35mm lens with a slightly brighter, f/2.4, maximum aperture? Simply, cost.

The older lens offered better than 1:1 subject magnification and almost no linear distortion. Plus, as one of Pentax's Limited series, it was extremely well crafted. But it comes with a somewhat steep $540 price tag.

Weekend Pentax shooters wanted an affordable normal lens, and Pentax's marketing department no doubt wanted one that could be kitted with bodies such as the K-r to introduce DSLR newbies to interchangeable lenses. Enter this attractively priced DA 35mm f/2.4 AL ($220, street).

Design and Handling

The new lens is compact at well under 2 inches, and, thanks to its plastic lensmount and a glass/plastic hybrid aspheric element, extremely light. Attractively finished in satin black, with Pentax's distinctive ornamental ring of bright green polished aluminum, it offers a generous, finely ribbed manual-focusing collar.

The MF action, while smooth and even across the focusing range, turns loosely with slight slop. On the Pentax K-r, its AF was fast, though jumpy and rather loud (the motor is in the DSLR, not the lens). Undermarked, the barrel has no distance or depth-of-field scales.

In the Test Lab

Optically, this affordable Pentax performed surprisingly well, matching or dipping just slightly below the upscale Limited 35mm.

Our bench tests in the Popular Photography Test Lab found Excellent-range contrast and sharpness, promising rich subject detail. In DxO Analyzer Version 3.2 tests of its distortion control, the 0.11% pincushioning put it right at the border between Imperceptible and Slight ranges, a fine showing.

By way of comparison, Nikon's digital-only 35mm DX lens was negligibly sharper, with noticeably more distortion (0.27% pincushion). Priced the same as the Pentax, the Nikon is a faster f/1.8, however.

So your decision will depend on how you plan to use it and how much you want to pay. Suitable for all the classic 50mm (equivalent) subjects such as full-length portraits, vacation, holiday, and snapshots, this 35mm will no doubt please its target audience: users stepping up from digital compacts. Faster than most compact lenses, it's small and light, sharp, and nearly distortion-free—and you can't beat that price. —*Julia Silber*

PENTAX-DA 35MM F/2.4 AL

WHAT'S HOT
Low price, optically strong.

WHAT'S NOT
Noisy AF; dimmer then expected.

WHO IT'S FOR
First-time Pentax DSLR owners.

In its 35mm f/2.4 AL lens, shown here at actual size, Pentax proves yet again that it can make unusually light and compact lenses without compromising optical quality.

SPECIFICATIONS

35MM (35.04mm tested), f/2.4 (f/2.48 tested), 6 elements in 5 groups. Focus ring turns 80 degrees.
DIAGONAL VIEW ANGLE: 44 degrees.
WEIGHT: 0.30 pound.
FILTER SIZE: 49mm.
MOUNTS: Pentax K AF.
STREET PRICE: $220.

TEST RESULTS

DISTORTION: 0.11% (Slight) pincushion.
LIGHT FALLOFF: Gone by f/3.5.
CLOSE-FOCUSING DISTANCE: 11.62 inches.
MAXIMUM MAGNIFICATION RATIO: 1:5.37.

SUBJECTIVE QUALITY FACTOR

Our standard lens test, SQF rates sharpness by print size

Size	5x7	8x10	11x14	16x20	20x24
2.4	[illegible]	[illegible]	92.7	87.5	81.1
4.0	[illegible]	[illegible]	93.6	89.1	83.6
5.6	[illegible]	[illegible]	93.6	89.2	83.8
8.0	[illegible]	[illegible]	93.3	88.7	83.1
11.0	[illegible]	[illegible]	92.8	87.7	81.5
16.0	[illegible]	[illegible]	92.1	86.4	79.4
22.0	[illegible]	[illegible]	90.9	84.2	75.8

35 MM

KEY

ABE'S of MAINE

CELEBRATING 30 YEARS

Cameras & Electronics **Since 1979**

CALL TOLL FREE: 1-800-227-0400

- Order online 7 days a week
- Worldwide Shipping
- All major credit cards accepted
- 30 Day Money Back Guarantee*

We have thousands of products at deeply discounted prices! Over 30 years of quality merchandise and quality service makes Abe's of Maine the right choice for your electronic needs.

Nikon D3100
w/18-55mm VR Kit
New!

Canon EOS Rebel T2i
w/18-55 IS Kit
New Low Price!

Panasonic DMZ-FZ100
14 MP Digital Camera
24X Optical Zoom
In Stock!

Pentax K-5
16.3 MP Digital SLR
In Stock!

Sony NEX-5
w/18-55mm Lens Kit
In Stock!

Canon XH-A1S
Professional Camcorder
In Stock!

Canon Vixia HF-S21 64
GB HD Camcorder
In Stock!

Sony HDR-CX550V HD
240 GB Camcorder
New Low Price!

Panasonic HDC-TM700
32 GB HD Camcorder
In Stock!

JVC GZ-HD500
80 GB HD Camcorder
In Stock!

Samsung
LN-55C65055 1080P
LCD Television
In Stock!

Samsung
UN-LN40C5000 40"
LED Television
In Stock!

Samsung
LN-32C6500 32" LED
Television
In Stock!

Samsung
PN-58C550 58"
Plasma Television
In Stock!

Sharp
UN-55C8000 55"
LED Television
In Stock!

Audio

Categories	Brands
Receivers	Sony
Speakers	Denon
Home Theatre Systems	Yamaha
	Samsung
DVD Players	Boston
HD Radio	Acoustics

Car Electronics

Categories	Brands
Receivers	Pioneer
Video	Panasonic
Radar	Sony
Detectors	JVC
CD Changers	Jensen
Amplifiers	

Projectors

Brands	
Optoma	Sanyo
Mitsubishi	Casio
NEC	Hitachi
BenQ	Canon
Epson	Sharp

GPS

Brands	
Garmin	Pioneer
Magellan	Atlantis
TomTom	Whistler
GoodYear	
Clarion	

Laptops

Brands	
Acer	HP
Samsung	Lenovo
Toshiba	

DJ Equipment

Categories	Brands
Mixers	Rane
Amplifiers	Pioneer
Systems	Stanton
Speakers	Numark
CD/DVD Players	Nady

Large Appliances

Categories	Brands
Refrigerators	LG
Washers/ Dryers	Bosch
	GE
Dishwashers	Fridgidaire
Ranges	Whirlpool
Microwaves	

Small Appliances

Categories	Brands
Coffee Makers	Cuisinart
Mixers	Waring Pro
Knives	J.A. Henckel
Blenders	Kitchen-Aid
Juicers	Nesco

Fitness Equipment

Categories	Brands
Treadmills	Bowflex
Bikes	Proform
Gyms	Horizon
Free Weights	LifeSpan
Elliptical	Evo

Musical Instruments

Categories	Brands
Guitars	Dean
Drums	Daisy Rock
Keyboards	Halo
	M-Audio
	ION

Please visit our website for product information

www.abesofmaine.com

*Some exclusions apply

AMATEUR PRO

Manual Prime

Shown nearly actual size, the Zeiss Planar 50mm is available in the M42 or universal mount, used on early Pentax and other SLR cameras.

A LENS FOR DSLR VIDEO

IN 2007, German lensmaker Carl Zeiss branched out from the medium-format lenses it had concentrated on for decades and followed its customers to the digital SLR 35mm platform. Now, four years later, the line spans nine focal lengths from 18mm to 100mm, all primes with manual focus only.

The 50mm f/1.4 may be the most interesting. The fastest and lightest of the new breed, it is available in the most mounts and costs the least by far—though still plenty of coin ($725, street).

It's a highly useful, normal focal length on full-frame bodies, and, on APS-C-format bodies, converts up to focal lengths fine for portraits: 75–80mm, depending on the sensor. Its speed suits it to low light and active subjects.

Design and Handling

Well marked with large subject distance scales in red (feet) and white (meters), the lens comes with a velvet-lined, metal lenshood that adds to its serious and sophisticated feel.

ZEISS PLANAR T* 50MM F/1.4

WHAT'S HOT

Extremely smooth manual focusing.

WHAT'S NOT

No autofocus.

WHO IT'S FOR

Serious DSLR videographers.

The lens is compatible with all autoexposure modes and offers focus confirmation, so you're not completely on your own in focusing manually.

Indeed, although this Zeiss may seem hobbled by its lack of autofocus, this is, ironically, its main attraction. The long turning radius of its finely-ribbed manual-focus ring (220 degrees) allows for unusually precise positioning. The equally fine, all-metal helicoid threading of the MF mechanism also produces an unusually smooth turn with a satisfying resistance.

This distinctively liquid and silent manual-focus action suits the lens uniquely well to DSLR video. In fact, Zeiss claims to sell as many to videographers as still photographers.

In the Test Lab

On our optical bench, the lens turned in Excellent-range SQF numbers, indicating, unsurprisingly, top-drawer sharpness and contrast. Of the four or five high-speed, full-frame 50mms tested in recent years, only the Sigma 50mm f/1.4 ($500, street) was significantly sharper.

On our DxO Analyzer 3.2 and other optical tests, the Zeiss's results—including Slight barrel distortion and essentially no light falloff—match or beat the class of fast 50s.

Bottom line? DSLR owners who are seriously into video owe it to themselves to try this lens. The buttery-smooth focus shift that melts from near to far has to be experienced through a viewfinder—or on a big movie screen—to be appreciated.

—Julia Silber

SPECIFICATIONS

50MM (51.74mm tested), f/1.4 (f/1.45 tested), 7 elements in 6 groups. Focus ring turns 220 degrees.
DIAGONAL VIEW ANGLE: 45 degrees.
WEIGHT: 0.87 pound.
FILTER SIZE: 58mm.
MOUNTS: Canon, M42 screw, Nikon, Pentax K/Samsung.
INCLUDED: Lenshood.
STREET PRICE: $725.

TEST RESULTS

DISTORTION: 0.24% (Slight) barrel.
LIGHT FALLOFF: Gone by f/2.
CLOSE-FOCUSING DISTANCE: 17.62 inches.
MAXIMUM MAGNIFICATION RATIO: 1:6.32.

SUBJECTIVE QUALITY FACTOR

Our standard lens test, SQF rates sharpness by print size

50 MM

Size	5x7	8x10	11x14	16x20	20x24
1.4	[illegible]	[illegible]	93.0	87.6	80.8
2.0	[illegible]	[illegible]	93.6	89.0	82.9
2.8	[illegible]	[illegible]	94.0	89.4	83.5
4.0	[illegible]	[illegible]	94.1	90.7	84.7
5.6	97.8	[illegible]	[illegible]	92.2	86.2
8.0	93.1	97.0	[illegible]	92.0	86.0
11.0	89.3	96.4	95.1	90.9	86.2
16.0	86.1	95.1	93.4	88.4	82.1

KEY A+ A B+ B C+ C D F

THE GUIDE

OUR OPINIONATED TAKE ON THE CAMERAS WE'VE TESTED

GUIDE TO THE GUIDE

In these three pages, we rate all of the current DSLRs (and one rangefinder), plus all of the current lenses within a given focal range, that we've tested. The star ratings reflect:

CAMERAS

- **Image quality:** Includes resolution, noise, and color accuracy
- **Performance/capabilities:** Includes autofocus, metering, and burst rate
- **Usability:** Includes ergonomics, controls, and customization

To match cameras look for the labels.

APS-C · FOUR THIRDS · FULL-FRAME · BEST IN CLASS · GETTING OLD · NEW MODEL

Is it worth the dough? Look for: STEAL · PRICEY

CANON EOS-1D MARK IV

★★★★1/2 APS-H

AMATEUR — PRO

$4,750, street, body only
Canon's premier speedster (in terms of JPEG and RAW burst rates) earns a half-star more in the rating due to increased resolution and ISOs in the stratospheric (102,400) range, but could have gained more with faster low-light AF.
STANDOUT SPEC 10 fps at full resolution—with metering and autofocus on all.
SENSOR 16.1MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO RES/FRAME RATE 1080p/30 fps, 720p/60 fps
LCD 3-in., 920,000-dot

CANON EOS-1Ds MARK III

★★★★1/2 FULL-FRAME

AMATEUR — PRO

$6,090, street, body only
Once Canon's megapixel king, it now shares that throne with the newer, and far less expensive, EOS 5D Mark II. Awesome image quality in a bulletproof body—at a high cost in both weight and dollars. A favorite of nature and studio shooters both.
STANDOUT SPEC Medium-format-caliber imaging from a (sort of) 35mm body.
SENSOR 21.1MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO None
LCD 3-in., 230,000-dot

CANON EOS 5D MARK II

★★★★1/2 FULL-FRAME

AMATEUR — PRO

$2,500, street, body only
Long-awaited update of the original full-frame workhorse, the Mark II impressed us with stellar image quality, HD video, rugged construction—but not the older autofocus system recycled from the Mark I. Film students—and cine pros—have taken to its video big time.
STANDOUT SPEC Excellent image quality up to ISO 3200—nuff said.
SENSOR 21.1MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO RES/FRAME RATE 1080p/30 fps, 720p/30 fps
LCD 3-in., 920,000-dot

CANON EOS 7D

★★★★ APS-C

AMATEUR — PRO

$1,700, street, body only
Canon's top APS-C body is also its first with wireless flash control through the pop-up. Solid, weathersealed build is bolstered by high-res images with low noise at high ISOs.
STANDOUT SPEC Its 8-fps native burst rate is the fastest of any APS-C format body, just beating out Nikon's D300s.
SENSOR 18MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO RES/FRAME RATE 1080p/30 fps, 720p/60 fps
LCD 3-in., 920,000-dot

CANON EOS 60D

★★★★1/2 APS-C

AMATEUR — PRO

$1,100, street, body only
It's all in here: Pro-grade controls and customization, top-notch HD video recording, hefty resolution, and great noise suppression. And we love the articulating LCD screen. Clearly, Canon's best x0D-class camera to date.
STANDOUT SPEC The fine pictures, delivered with Excellent overall image quality.
SENSOR 18MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO RES/FRAME RATE 1080p/30 fps, 720p/60 fps
LCD 3.0-in. 1.04 million-dot

CANON EOS REBEL T1i

★★★★ APS-C

AMATEUR — PRO

$700, street, with 18–55mm f/3.5–5.6 EF-S IS lens
As far from a "starter" camera as any Rebel has ever come (up until the T2i), it has the megapixel count and processing power as some pricier DSLRs.
STANDOUT SPEC Sheer imaging power—both still and video—ranks best for this price.
SENSOR 15.1MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO RES/FRAME RATE 1080i/20 fps, 720p/30 fps
LCD 3-in., 920,000-dot

CANON EOS REBEL T2i

★★★★ APS-C

AMATEUR — PRO

$900, street, with 18–55mm f/3.5–5.6 EF-S IS lens
With better video and more resolving power than we've ever seen at its price level, this Canon delivers enthusiast-level image quality in an "entry-level" Rebel body.
STANDOUT SPEC Best video you can find for under $1,000, and have you seen that LCD?
SENSOR 18MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO RES/FRAME RATE 1080p/30 fps, 720p/60 fps
LCD 3-in., 1.04 million-dot

CANON EOS REBEL XS

★★1/2 APS-C

AMATEUR — PRO

$550, street, with 18–55mm f/3.5–5.6 EF-S IS lens
Inheriting the sensor of the former "top Rebel" XTi, the XS adds live view to round out Canon's most economical DSLR. And it comes with an IS kit lens, standard.
STANDOUT SPEC The XS, for an entry-level model, autofocuses faster than many a pricier camera.
SENSOR 10MP CMOS, 12-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO None
LCD 2.5-in., 230,000-dot

LEICA M9

★★★1/2 FULL-FRAME

AMATEUR — PRO

$6,995, street, body only
Leica finally serves up a full-frame M-series body, and in our lab tests it produced Excellent image quality through ISO 800. Outside the lab, we loved the classic Leica style and good old-fashioned simplicity of operation. But what's with the maximum ISO of 2500?
STANDOUT SPEC A sensor that delivers all the quality Leica lenses can provide.
SENSOR 18MP CCD, 14-bit RAW capture
IMAGE STABILIZATION None
VIDEO None
LCD 2.5-in., 230,000-dot

NIKON D3S

★★★★1/2 FULL-FRAME

AMATEUR — PRO

$5,200, street, body only
Update of the D3 was the first DSLR to break the ISO 100,000 barrier, and adds video capture. If 12.1MP sounds low, superb color accuracy and clean images up to ISO 6400 make up for it.
STANDOUT SPEC Noise control—essentially the best in the business.
SENSOR 12.1MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO RES/FRAME RATE 720p/24 fps
LCD 3-in., 921,000-dot

NIKON D3X

★★★★★ FULL-FRAME

AMATEUR — PRO

$7,500, street, body only
Our 2009 Camera of the Year, it's the image-quality champ of current DSLRs—and should be for a while. Built like a tank, heavy and expensive, but those who love it don't care. Has the fastest AF in low light.
STANDOUT SPEC The absolute, breathtaking state-of-the-artness of it.
SENSOR 24.5MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO None
LCD 3-in., 920,000-dot

NIKON D300S

★★★★ APS-C

AMATEUR — PRO

$1,460, street, body only
Thoughtful major tweak of the well-regarded D300 adds video (we wish it did 1080p at 30 fps) and increases native burst rate to 7 fps. Very competitive with the current state of the midrange art, but that battle keeps on smokin'.
STANDOUT SPEC Color-and-shape-sensing AF tracking a standout shooting tool.
SENSOR 12.3MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO RES/FRAME RATE 720p/24 fps
LCD 3-in., 921,000-dot

CAMERAS AND LENSES—TESTED AND RATED FOR FULL TEST REPORTS AND INFO ON HOW WE TEST AND RATE CAMERAS AND LENSES, VISIT POPPHOTO.COM.

NIKON D700

★★★★ FULL-FRAME

AMATEUR PRO

$2,380, street, body only For the enthusiast craving pro-grade features, the D700 offers a full-frame sensor borrowed from the D3 supercamera, sensitivity to ISO 25,600, 51-zone AF, and a pop-up flash with wireless flash control.
STANDOUT SPEC That big, juicy full-frame sensor in an enthusiast's $2,380 body, for great low-noise shooting from ISO 100 through 6400.
SENSOR 12.1MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO None
LCD 3-in., 921,000-dot

NIKON D3100

★★★1/2 APS-C

AMATEUR PRO

$640, street, with 18–55mm f/3.5–5.6 DX Nikkor VR lens Nikon's update of its least expensive DSLR adds more resolution and two stops more sensitivity, but AF remains slightly slower than its competitors. We do like the new switch for entering the live view and HD video recording mode, though.
STANDOUT SPEC Its top sensitivity of ISO 12,800.
SENSOR 14.2MP CMOS, 12-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO RES/FRAME RATE 1080p/24 fps, 720p/30 fps
LCD 3-in., 230,000-dot

NIKON D5000

★★★ APS-C

AMATEUR PRO

$750, street, with 18–55mm f/3.5–5.6 DX Nikkor VR lens
For Nikonians who want a hinged and tilting LCD, the D5000 is the only option. Plus you get video, 4-fps burst shooting, speedy AF, and sensitivity out to ISO 6400.
STANDOUT SPEC The price—it offers much of what the D7000 does, for considerably less.
SENSOR 12.3MP CMOS, 12-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO RES/FRAME RATE 720p/24 fps
LCD 2.7-in., 230,000-dot

NIKON D7000

★★★★ APS-C

AMATEUR PRO

$1,200, street, body only
For Nikonians looking to upgrade from a lesser model, here's the no-brainer choice. It's got 1080/24p video, two memory card slots, plus metering and AF upgrades over past midrange Nikons. It's also got fierce competition in this class from Canon.
STANDOUT SPEC Controls and customization like those of high-end Nikons.
SENSOR 16.2MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO RES/FRAME RATE 1080p/24 fps 720p/30 fps
LCD 3-in., 921,000-dot

OLYMPUS E-5

★★★★ FOUR THIRDS

AMATEUR PRO

$1,700, street, body only
With class-leading weather-sealing, extremely fast AF in bright light, and impressive noise control, the E-5 offers an exciting alternative to competing models. Add wireless flash control and Oly's stunning lenses to the mix, and you've got one heck of a go-anywhere shooting machine.
STANDOUT SPEC That extensive weathersealing and super-tough magnesium-alloy body construction.
SENSOR 12.3MP LiveMOS, 12-bit RAW capture
IMAGE STABILIZATION 3 stops
VIDEO RES/FRAME RATE 720p/30 fps
LCD 3-in., 920,000-dot

OLYMPUS E-30

★★★ FOUR THIRDS

AMATEUR PRO

$830, street, body only
This less-expensive companion to the pro-grade Olympus E-5 boasts equal megapixels, an impressive for its class 5-fps burst rate, comparable handling, and an assortment of fun filters—pop art, anyone?
STANDOUT SPEC The fully-articulating LCD screen makes live view much more useful while also protecting the screen from harm if you turn it inward.
SENSOR 12.3MP LiveMOS, 12-bit RAW capture
IMAGE STABILIZATION 2.5–3 stops
VIDEO None
LCD 2.7-in., 230,000-dot

OLYMPUS E-620

★★★ FOUR THIRDS

AMATEUR PRO

$648, street, with 14–42mm f/3.5–5.6 Zuiko Digital lens
For arty amateurs, the Olympus E-620 offers the still-new seeming Art Filters, special effects that invite experimentation. Plus: its small, lightweight build, and body-based,sensor-shift IS.
STANDOUT SPEC A super-articulated swiveling/tilting LCD monitor.
SENSOR 12.3MP LiveMOS, 12-bit RAW capture
IMAGE STABILIZATION 2 stops
VIDEO None
LCD 2.7-in., 230,000-dot

PENTAX K-5

★★★★1/2 APS-C

AMATEUR PRO

$1,470, street, body only
Pentax ups the ante with this replacement for the K-7: To the rugged and ergonomic body, it adds an Excellent-resolving sensor, 7-fps burst, and ISOs to 51,200. But while AF speed is improved over its predecessor's, it could stand improvement.
STANDOUT SPEC What a body! To hold it is to love it.
SENSOR 16.3MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION 2.5 stops
VIDEO RES/FRAME RATE 1920x1080/25 fps; 720/25/30 fps
LCD 3-in., 921,000-dot

PENTAX K-X

★★★ APS-C

AMATEUR PRO

$490, street, with 18–55mm f/3.5–5.6 Pentax DA lens
The latest in a long line of Pentax starter SLRs stacks up very well against its competitors, with 11-point AF, HD video, and ISO 12,800.
STANDOUT SPEC That burst rate of 4.7 fps is highest in this class.
SENSOR 12.4MP CMOS, 12-bit RAW capture
IMAGE STABILIZATION 1.5 stops
VIDEO RES/FRAME RATE 720p/24 fps
LCD 2.7-in., 230,000-dot

SIGMA SD15

★★ FOVEON X3

AMATEUR PRO

$990, street, body only
With the same unique 3-layer RGB sensor as the SD14, the SD15 has less resolving power than most DSLRs in our tests, but a significantly larger buffer memory, a beefed-up metering system, and a nicer LCD make it a worthy upgrade.
STANDOUT SPEC Imaging with a creamy, subtle, almost film-like quality.
SENSOR 4.7x3-layer Foveon X3 sensor, 12-bit RAW capture
IMAGE STABILIZATION Lens-based
VIDEO None
LCD 3-in., 460,000-dot

SONY ALPHA 33

★★★ APS-C

AMATEUR PRO

$750, street, with 18–55mm f/3.5–5.6 Sony DT SAM lens
Little sister to the A55, the A33 uses the same semi-transparent mirror for continuous AF during video capture, as well as a 6-fps burst rate and super-fast AF. Its imaging proved noisier than the A55's in our tests, though.
STANDOUT SPEC Fast AF, even in video, with tracking.
SENSOR 14.2MP CMOS, 12-bit RAW capture
IMAGE STABILIZATION 2.5 stops
VIDEO RES/FRAME RATE 1080p/30 fps
LCD 3-inch, 921,600-dot

SONY ALPHA 55

★★★1/2 APS-C

AMATEUR PRO

$850, with 18–55mm f/3.5–5.6 Sony DT SAM lens
Our Camera of the Year for 2010, its semi-transparent mirror allows continuous autofocus while capturing video at up to 1920x1080, 30 fps. Plus the fastest burst speed in its class, extremely fast AF, and the best DSLR live view yet.
STANDOUT SPEC That fast AF and the 10-fps burst rate.
SENSOR 16.2MP CMOS, 12-bit RAW capture
IMAGE STABILIZATION 2.5 stops
VIDEO RES/FRAME RATE 1080p/30 fps
LCD 3-inch, 921,600-dot

SONY ALPHA 390

★★★ APS-C

AMATEUR PRO

$500, street, with 18–55mm f/3.5–5.6 Sony DT SAM lens
Update of the Alpha 380 gets a new improved grip, keeps the same sensor and the *made-for-beginners* display interface. And again, it's a top bargain in starter DSLRs.
STANDOUT SPEC Live view that works without delay in AF or firing. But it shows less than 100% of the scene.
SENSOR 14.2MP CCD, 12-bit RAW capture
IMAGE STABILIZATION 2.5–3 stops
VIDEO None
LCD 2.7-in., 230,400-dot

SONY ALPHA 850

★★★★ FULL-FRAME

AMATEUR PRO

$2,000, street, body only
Minor change of the A900 drops viewfinder accuracy to 98%, slows burst rate to 3 fps, and forgoes a wireless remote control. It kept the impressive image quality, top ergonomics, and superfast AF, though—so much so that it achieved an equal rating to the A900.
STANDOUT SPEC The most full-frame bang for the buck you can get today.
SENSOR 24.6MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION 2–2.5 stops
VIDEO None
LCD 3-in., 921,600-dot

SONY ALPHA 900

★★★★ FULL-FRAME

AMATEUR PRO

$2,700, street, body only Sony's blockbuster full-framer puts up top resolution numbers at ISO 100 but has some catchup to do in noise and color accuracy. Speedy AF and great ergonomics almost make us forget that it doesn't have live view or pop-up flash.
STANDOUT SPEC That big, bright viewfinder makes you realize why you prefer SLRs.
SENSOR 24.6MP CMOS, 14-bit RAW capture
IMAGE STABILIZATION 2–2.5 stops
VIDEO None
LCD 3-in., 921,600-dot

800-947-9980
212-444-6666
Fax: 212-239-7770

420 Ninth Avenue
Corner of 34th Street
New York, N.Y 10001

B&H
PHOTO · VIDEO · PRO AUDIO
The Professional's Source™

Store & Mail Order Hours: Sunday 10-5 | Mon-Thurs 9-7 | Friday 9-1 EST/9-2 DST | Closed Saturday

Over 200,000 products, at your leisure
www.bhphotovideo.com

B&H Online

- Search Capabilities
  Find products fast
- Podcasts
  B&H experts provide essential product information in video interviews
- Product Demos
  View products from every angle, right on your computer screen
- Customer Reviews
  Useful feedback from other customers to help you decide
- Live Help
  Chat online with support staff

Upcoming Holiday Schedule
March 20 Closed

When in New York,
Visit our SuperStore

- Over 70,000 square feet of the latest gear
- The most knowledgeable Sales Professionals
- Hands-on demos
- Convenient free parking available

Free in-depth Interactive
HDSLR GUIDE
• Learn the basics
• Issues & solutions
• Select the right gear
bhphoto.com/HDSLRhub

We Buy, Sell, and Trade
Used Equipment
888-520-3010
Speak to a Sales Associate
bhphotovideo.com/used
Shop conveniently online

Prices, specifications, and images are subject to change without notice. Manufacturer rebates are subject to the terms and conditions (including expiration dates) printed on the manufacturers' rebate forms. Not responsible for typographical or illustrative errors. © 2000-2010 B & H Foto & Electronics Corp.

B&H
PHOTO - VIDEO - PRO AUDIO
The Professional's Source™

When in New York,
Visit our SuperStore

420 Ninth Ave.
Corner of 34th Street
New York, N.Y. 10001

- Over 70,000 square feet of the latest gear
- The most knowledgeable Sales Professionals
- Hands-on demos
- Convenient free parking available

Subscribe to our free Catalog
bhphoto.com/catalog
212-444-6633

Canon Powershot SD1400 IS

- 720p HD Video with HDMI Output
- Bright 2.7" PureColor System LCD
- 4x Optical Zoom • 4x Digital Zoom
- 5-20mm f/2.8-5.9 (35mm equiv: 28-112mm) • SD/SDHC Card Slot
- Dimensions: 3.63 x 2.21 x 0.70"

#CAPSSD1400 Black, Orange, Pink, Silver*

14 Mega Pixels

Canon Powershot S95

- 3.0" LCD Monitor • RAW + JPEG Files
- 3.8x Optical Zoom • 4x Digital Zoom
- 6-22.5mm f/2.0-4.9 (35mm equiv: 28-105mm) • SD/SDHC/SDXC Card Slot
- 1280x720p HD Video with Stereo Sound
- Dimensions: 3.93 x 2.30 x 1.16"

*#CAPSS95**

10 Mega Pixels

Canon Powershot G12

- 2.8" Vari-Angle LCD • 1280 x 720p HD Video Capture • Stereo Sound for Video
- 5x Optical Zoom • 4x Digital Zoom
- 6.1-30.5mm f/2.8-4.5 (35mm equiv: 28-140mm) • SD/SDHC/SDXC Card Slot
- RAW File Mode • Dim.: 4.41 x 3 x 1.9"

*#CAPSG12**

10 Mega Pixels

FUJIFILM Finepix HS10

- 3" LCD Monitor • HD Video 1080p with Stereo Sound • 30x Optical Zoom
- 4.2-126mm f/2.8-5.6 (35mm equiv: 24-720mm) • SD/SDHC Card Slot
- RAW and JPEG File Formats
- Dimensions: 5.1 x 3.6 x 5"

*#FUFPHS10**

10 Mega Pixels

Nikon Coolpix L110

- 3" High Res. LCD • 15x Optical Zoom
- 5-75mm f/3.5-5.4 (35mm equiv: 28-420mm) • SD/SDHC Card Slot
- 5-Way VR Image Stabilization • 720p HD Video • Sports Continuous Shooting
- Dimensions: 4.3 x 3.1 x 3"

*#NICPL110**

12 Mega Pixels

Nikon Coolpix P100

- 3" Vari-Angle LCD • 26x Optical Zoom
- 4.6-120mm f/2.8-5 (35mm equiv: 26-678mm) • SD/SDHC Card Slot
- 5-Way VR Image Stabilization
- Full 1080p HD Video @ 30 fps with Stereo
- Dimensions: 4.5 x 3.3 x 3.9"

*#NICPP100**

10 Mega Pixels

OLYMPUS Stylus Tough-8010

- Shockproof, Waterproof, Freezeproof, Crushproof • 2.7" LCD
- 5x Optical Zoom • 5x Digital Zoom
- 5-25mm f/3.5-5.1 (35mm equiv: 28-140mm) • SD/SDHC Card Slot
- Dimensions: 3.9 x 2.5 x 0.94"

#OLST8010 Black, Silver*

12 Mega Pixels

Panasonic Lumix DMC-ZS7

- 3" LCD • HD Video Recording
- 12x Optical Zoom • 4x Digital Zoom
- 4.1-49.2mm f/3.3-4.9 (35mm equiv: 25-200mm) Leica DC Vario-Elmarit
- SD/SDHC Card Slot • GPS Geotagging
- Dimensions: 4.07 x 2.35 x 1.28"

#PADMCZS7 Black, Blue, Red, Silver*

12 Mega Pixels

PENTAX Optio W90

- 2.7" LCD • SD/SDHC Card Slot
- 5x Optical Zoom • 6.25x Digital Zoom
- 5-25mm f/3.5-5.5 (35mm equiv: 28-140mm)
- Waterproof, Shockproof, Coldproof
- Dustproof • HD Movie HD Video Recording
- Dimensions: 4.2 x 2.3 x 1.0"

#PEOW90 Black, Green*

12 Mega Pixels

SONY CyberShot DSC-W310

- 2.7" LCD Monitor • 4x Optical Zoom
- 4.9x Digital Zoom (@ 8MP)
- 5-20mm f/3-5.8 (35mm equiv: 28-112mm)
- MS Duo/Pro Duo and SD/SDHC Dual Card Slot • Smile Shutter Technology
- Dimensions: 3.75 x 2.17 x 0.74"

#SODSCW310 Black, Pink, Silver*

12 Mega Pixels

SONY CyberShot DSC-HX5V

- 3" LCD • 1080i AVCHD HD Movies
- 10x Optical Zoom • 14x Digital Zoom
- 4.25-42.5mm f/3.5-5.5 35mm equiv: 25-250mm)
- MS Duo, MS PRO Duo, SD/SDHC Card Slot
- Dimensions: 4.05 x 2.27 x 1.14"

#SODSCHX5VB

10 Mega Pixels

SONY CyberShot DSC-HX1

- 3" LCD Monitor • HD Video Recording
- 20x Optical Zoom • 26x Digital Zoom
- 5-100mm f/2.5-5.6 (35mm equiv: 28-560mm) G-Lens • Handheld Twilight Mode • MS Duo/Pro Duo Card Slot
- Dimensions: 4.63 x 3.38 x 3.63"

*#SODSCHX1**

9 Mega Pixels

MEMORY CARDS

CF Compact Flash

	Delkin			Kingston					Lexar		Sandisk		
	Std	Pro	Combat 91 MBs	Std	Elite Pro 133x	Ultimate 266x	Ultimate 600x	Platinum II 200x	400x	600x	Ultra II	Extreme 60 MBs	Extreme Pro 90 MBs
2GB	12.99	—	—	—	—	—	—	—	—	—	—	—	—
4GB	15.95	26.95	59.95	11.95	16.49	—	—	23.41	—	—	26.95	—	—
8GB	24.95	38.50	89.99	17.95	24.95	—	—	31.95	66.17	125.00	38.95	69.95	—
16GB	44.95	76.50	145.95	—	39.95	69.95	99.95	49.55	114.95	192.95	77.95	124.95	219.99
32GB	94.95	122.50	269.95	—	69.95	119.95	139.95	—	173.82	329.95	—	185.33	389.99
64GB	—	249.95	—	—	—	—	—	—	—	—	—	—	699.99

MSDUO Memory Stick Pro Duo

	Sandisk	Sony	
	Pro-HG Ultra 30 MBs	Mark II 20 MBs	Pro-HG HX 30 MBs
2GB	—	14.99	—
4GB	—	17.95	—
8GB	—	—	27.44
16GB	—	—	53.08
32GB	160.99	126.95	115.97

SD Secure Digital

	Delkin		Kingston	Sandisk	Panasonic	Sony	
	Std	Micro	Micro	Micro	5MBs Class 4	Std Class 4	Micro
2GB	8.50	8.95	6.95	7.50	7.99	6.99	7.63

SDXC* Extended Capacity

	Kingston	Panasonic	Sandisk
	Class 10 60/35mbs	Class 10 22mbs	Class 4 15mbs
48GB	—	324.20	—
64GB	299.95	449.00	211.09

* **Note:** Not all devices support SDXC cards

XD xD Memory

	Olympus M+	
1GB	Standard	11.99
2GB	Standard	13.99

SD HC Secure Digital High Capacity

	Delkin			Kingston				Lexar		Panasonic		Sandisk				Sony		
	Pro Class 6	Pro Class 10	Micro	Std Class 4	Ultimate Class 6 G2	Ultimate Class 10	Micro Class 4	Std Class 2	Platinum II Class 6 100x	Professional Class 10 133x	Std Class 4 15 MBs	Gold Class 10 22 MBs	Std	Ultra Class 4 15MBs	Extreme Class 6 20MBs	Extreme Class 10 30MBs	Micro	Std. Class 4	Micro Class 4
4GB	9.95	18.50	18.50	7.50	—	—	7.95	8.95	14.95	—	—	18.69	11.99	14.95	28.50	41.95	9.95	10.95	10.64
8GB	19.95	24.95	29.95	14.95	67.95	17.95	14.95	15.95	21.94	53.79	22.99	37.69	16.99	33.95	42.50	69.95	17.99	18.79	18.83
16GB	39.95	49.95	52.50	29.95	—	38.50	—	24.91	36.75	99.95	39.02	75.04	31.95	59.95	84.95	108.95	36.50	37.87	—
32GB	89.95	104.50	—	69.95	—	74.95	—	43.99	83.95	169.95	—	239.95	106.50	109.95	—	198.99	124.95	84.00	—

Panasonic Lumix DMC-GH2 DSLR

- 1920x1080 60i HD Video
- Touch Screen Control for Stills/Video
- Capture in JPEG or RAW
- 3" Free-Angle LCD
- Compact Micro 4/3 Design
- SD/SDHC Card Slot
- Dolby Stereo Sound with Video
- High Sensitivity Up to ISO 12800
- iA (Intelligent Auto) Mode Stills/Video
- MEGA O.I.S. (Optical Image Stabilizer)
- Dust Reduction System • Available in Black or Silver

Kit with 14-42mm ..... *#PADMCGH2K**

16 Mega Pixels

PENTAX K-r DSLR

- 720p HD Video
- 11 Point SAFOX IX Autofocus System
- In-Camera HDR Image Capture
- IrSimple Infrared Data Transfer
- 3" LCD monitor with Live View
- Uses Pentax AF Lenses (1.5x factor)
- SD/SDHC Card Slot
- 6 FPS Frame Rate
- ISO 100-25,600

Body Only ..... *#PEKR**

12 Mega Pixels

OLYMPUS EP-2 DSLR

- Capture in JPEG or RAW
- HD Stills and Video with Live View
- 3" HyperCrystal LCD
- ISO 100-6400
- 4/3 Full Frame Zuiko Specific Lenses
- Advanced Dust Reduction
- SD/SDHC Card Slot

Black Kit with 14-42mm Zuiko Lens ..... *#OLEP214428*
Black Kit with 17mm f/2.8 Zuiko Lens ..... *#OLEP217B*

12 Mega Pixels

SONY Alpha NEX-5 DSLR

- Extremely Compact HD Imaging System
- Tiltable 3" TFT TruBlack LCD
- Uses Sony E-mount series Lenses
- HD 1080/60i Video / Dolby Digital (AC-3) • Up to 7 fps
- MS PRO Duo or SD/SDHC Card Slots • Up to ISO 12800
- Auto HDR capture / DRO Optimizer
- In-Camera 226° Sweep Panoramas
- Magnesium-alloy Body • Available in Black or Silver

with 16mm Lens ..... *#SONEX5A**
with 18-55mm Lens ..... *#SONEX5K**

14 Mega Pixels

OLYMPUS E-5 DSLR

- RAW & JPEG Still Image Formats
- 3" Dual Axis Swivel HyperCrystal LCD
- 4/3 Full Frame Zuiko-Specific Lenses
- Olympus TruePic V+ Image Processor
- CF & SDHC/SDXC Card Slots
- Splashproof and Dustproof
- 1280 x 720p HD Video Capture
- Mechanical Image Stabilization

Body Only ..... *#OLE5*

12 Mega Pixels

SONY Alpha SLT-A55 DSLR

- Translucent Mirror for Fast Focus
- 921K Dot 3" Tiltable LCD screen
- Uses Sony Alpha (compatible with Minolta Lenses (1.5x factor) • Built-In GPS
- Full HD 1080/60i Video
- 3D Sweep Panorama Mode
- Quick AF for Full HD Movie Capture
- 10 FPS Continuous Shooting
- Up to ISO 12800 Sensitivity

Body Only ..... *#SOSLTA55**

16 Mega Pixels

OLYMPUS

Flash System

FL-20 Flash	$149.95	FL-36R Flash	$229.95
FL-50R Flash	$499.95	RF-11 Ring Flash	$249.95
SRF-11 Ring Flash Set	$559.95		
TF-22 Twin Flash	$449.95		
STF-22 Twin Flash Set	$739.95		

Zuiko 4/3 System Digital Lenses

8/3.5 Fish-eye ED	$799.99
35/3.5 Macro ED (52ø)	$229.95
50/2.0 Macro ED (77ø)	$499.95
150/2.0 ED (82ø)	$2,499.95
300/2.8 ED	$6,999.95
7-14/4.0 ED (72ø)	$1,799.95
11-22/2.8-3.5 ED (72ø)	$799.95
12-60/2.8-4 ED SWD (72ø)	$999.95
14-42/3.5-5.6 ED (58ø)	$249.95
18-180/3.5-6.3 ED (62ø)	$499.95
35-100/2.0 ED (77ø)	$2,499.99
40-150/4-5.6 ED (58ø)	$279.95
50-200/2.8-3.2 ED SWD (67ø)	$1,199.95
90-250/2.8 ED (105ø)	$5,999.95
EC-14 1.4x Teleconverter	$439.95
EC-20 2x Teleconverter	$479.95
MF-1 OM Lens Adapter	$99.95

PENTAX

AF Flash System

AF-360FGZ	AF-540FGZ

SMCP-DA Digital AF Lenses

14/2.8 ED IF (77ø)	15/4.0 ED AL (49ø)
35/2.8 Mac. Limited (49ø)	55/1.4 Limited (58ø)
21/3.2 AL Limited "Pancake" (49ø)	
40/2.8 Limited "Pancake" (49ø)	
70/2.4 Limited "Pancake" (49ø)	
200/2.8 ED IF	300/4.0 ED IF SDM (77ø)
10-17/3.5-4.5 ED IF (77ø)	12-24/4 ED AL IF (77ø)
16-45/4 ED AL (67ø)	
16-50/2.8 ED AL IF SDM (77ø)	
17-70/4.0 AL IF SDM (67ø)	
18-55/3.5-5.6 AL II (52ø)	
50-135/2.8 ED IF SDM (67ø)	
50-200/4-5.6 ED WR (52ø)	
55-300/4-5.8 ED (58ø)	
60-250/4.0 ED IF SDM (67ø)	

AF Lenses for 35mm & Digital SLRs

31/1.8 Limited (58ø)	50/1.4 (49ø)
43/1.9 Limited "Pancake" (49ø)	
50/2.8 Macro (52ø) with Case	
77/1.8 Limited (49ø)	
100/2.8 D FA AW Macro (49ø)	

SONY

Compatible with Maxxum DSLRs

Flash System

HVL-F42AM	$299.99	HVL-F58AM	$499.99

Digital Lenses

16/2.8 Fish-eye	$849.99		
20/2.8 (72ø)	$599.99	28/2.8 (49ø)	$269.99
35/1.4 (55ø)	$1,369.99	50/1.4 (55ø)	$369.99
50/2.8 Macro (55ø)	$479.99		
85/1.4 Carl Zeiss (72ø)	$1,369.99		
100/2.8 Macro (55ø)	$679.99		
135/1.8 Carl Zeiss (77ø)	$1,479.99		
135/2.8 STF (72ø)	$1,249.99		
300/2.8 G APO	$6,299.99	500/8 Reflex	$749.99
11-18/4.5-5.6 DT (77ø)	$699.99		
16-35/2.8 ZA SSM Carl Zeiss (77ø)	$1,899.99		
16-80/3.5-4.5 DT Carl Zeiss (62ø)	$749.99		
16-105/3.5-5.6 DT (62ø)	$599.99		
18-200/3.5-6.3 DT (62ø)	$529.99		
18-250/3.5-6.3 DT (62ø)	$579.99		
24-70/2.8 Carl Zeiss (77ø)	$1,599.99		
70-200/2.8 G APO (77ø)	$1,799.99		
70-300/4.5-5.6 G (62ø)	$849.99		
75-300/4.5-5.6 (55ø)	$249.99		
1.4x Teleconverter	$479.99	2x Teleconverter	$479.99

expoimaging

Digital White Balance Filters

ExpoDisc is an easy to use custom white balance solution that eliminates the inconvenience and inconsistencies of other methods.

- Use in Ambient, Studio or Mixed Light
- Easy to Use, Durable, Compact

52mm - Neutral or Portrait	#EXWB52* ... $69.95
58mm - Neutral or Portrait	#EXWB58* ... $79.95
62mm - Neutral or Portrait	#EXWB62* ... $84.95
67mm - Neutral or Portrait	#EXWB67* ... $89.95
72mm - Neutral or Portrait	#EXWB72* ... $94.95
77mm - Neutral or Portrait	#EXWB77* ... $99.95
82mm - Neutral or Portrait	# EXWB82* ... $104.95

OLYMPUS
50mm f/2 Macro ED Zuiko Digital Lens

- *Designed exclusively for Digital SLRs*
- Ideal for macro photography and also as a portrait lens
- Magnification 1:2
- ED glass element
- Min. focus: 9.45"
- 52mm filter diameter
- Weight: 10.6 oz

PENTAX
50-200mm f/4-5.6 SMCP-DA ED WR AF Digital Lens

- *Designed exclusively for Digital SLRs*
- Ideal for portraiture, sports, and scenery
- Weather resistant
- Quick-Shift Focus System
- Min. focus: 3.6'
- 52mm filter diameter
- Weight: 9 oz

SONY
HVL-F58AM Shoe-Mount Digital Flash

- Zoom Head (24-105mm)
- Bounce & Swivel Head
- Guide No. 190'
- TTL Dedication
- Vari-Power
- High-Speed Sync
- Auto WB Adjustment
- Wireless Ratio Control
- Weight: 15.6 oz

SONY
16-80mm f/3.5-4.5 Carl Zeiss T* DT Digital Lens

- *Designed exclusively for Digital SLRs*
- Ideal for snapshots, portraits, interiors, or outdoor scenery
- 35mm equiv: 24-120mm
- Min. focus: 13.8"
- 62mm filter diameter
- Weight: 15.5 oz

B&H
PHOTO - VIDEO - PRO AUDIO
The Professional's Source™

bhphotovideo.com

800-947-9980
212-444-6666
Fax:
212-239-7770

Quick Dials
Digital SLR's and Accessories ..... #64
Digital Point & Shoots and Accessories ..... #61

We Buy, Sell and Trade Used Equipment

Store & Mail Order Hours:
Sunday 10-5 • Mon.-Thurs. 9-7
Friday 9-1 EST/9-2 DST
Saturday Closed

Free Interactive HDSLR GUIDE
bhphoto.com/HDSLRhub

B&H
PHOTO - VIDEO - PRO AUDIO
The Professional's Source™

When in New York, Visit our SuperStore

420 Ninth Ave.
Corner of 34th Street
New York, N.Y. 10001

- Over 70,000 square feet of the latest gear
- The most knowledgeable Sales Professionals
- Hands-on demos
- Convenient free parking available

Subscribe to our free Catalog
bhphoto.com/catalog
212-444-6633

Canon Digital Rebel XS DSLR

- 2.5" LCD Monitor
- Live View Function
- Uses Canon EF Lenses (1.6x factor)
- SD/SDHC Card Slot
- Auto Lighting Optimizer
- ISO 100-1600
- USB 2.0
- Picture Style Settings
- Integrated Cleaning System
- 3 fps Continuous Shooting

Kit with 18-55mm ..... #CAEDRXSKB

10 Mega Pixels

Canon Digital Rebel T2i DSLR

- 3" Clear View LCD with Advanced Live View
- Uses Canon EF Lenses (1.6x factor)
- SD/SDHC Card Slot
- 3.7 fps Continuous Shooting
- ISO Expandable to 12,800
- RAW and/or JPEG
- Eye-Fi Menu Status Indicator Support

Body Only ..... #CAEDRT2I
Kit with 18-55mm IS ..... #CAEDRT2IK

18 Mega Pixels

Canon EOS-60D DSLR

- 1920 x 1080 HD Video Capture
- DIGIC 4 Image Processor
- SD/SDHC/SDXC Card Slot
- Works with all Canon EF & EF-S Lenses
- Vari-Angle Clear View 3.0" Flip-Out LCD
- HDMI Output to HDTV
- 5.3 fps Continuous Shooting
- ISO 6400 - Expandable to 12800

Body Only ..... #CAE60D

18 Mega Pixels

Canon EOS-5D Mark II DSLR

- Record HD Video • 1080p Movie Mode
- Full-Frame Sensor • Live View Mode
- 3" High Resolution LCD Screen
- Uses Canon EF Lenses
- CF, MD Card Slot
- Dust and Weather Resistant
- Self-Cleaning Sensor
- 3.9 fps Burst Mode
- 9-point AF Sensor Array
- ISO Range 50-25600

Body Only ..... #CAE5D2
Kit with 24-105mm IS ..... #CAE5D224105

21 Mega Pixels

Canon EOS-7D DSLR

- Record HD Video • 3" LCD
- Uses Canon EF Lenses
- CF, MD Card Slot
- Dust and Weather Resistant
- Selectable Video Exposure and Frame Rates
- 19-Point, All Cross-Type AF System
- ISO 100-6400 (expandable to 12800) • 8 fps Burst Mode

Body Only ..... #CAE7D
Kit with 28-135mm IS ..... #CAE7D28135

18 Mega Pixels

Canon EOS-1D Mark IV DSLR

- HD Video Recording
- Selectable Video Exposure + Frame Rates
- Self-Cleaning Sensor
- 3" LCD Monitor
- Uses Canon EF Lenses
- SD/SDHC & CF card slots
- 10 fps Burst Mode
- Dust and Weather Resistant
- 45 Point AF System
- High Sensitivity (ISO 102,400)

Body Only ..... #CAE1D4*

16 Mega Pixels

Canon SLR Lenses and Flashes

Call for Available Rebates

	IMP	USA
EOS Flash System (USA)		
270EX	—	$144.00
430EX II	—	$280.00
580EX II	—	$445.00
MR-14EX Ringlight	—	$494.00
MT-24EX Twin Flash	—	$726.00
EF-S Lenses for Digital Only Compatible with the 20D, 30D, 40D, 50D & Digital Rebel only		
60/2.8 USM Macro (52ø)	$399.00	$422.00
10-22/3.5-4.5 USM (77ø)	$739.00	$770.00
15-85/3.5-5.6 IS USM (72ø)	—	$720.00
17-55/2.8 IS USM (67ø)	$1,040.00	$1,060.00
18-55/3.5-5.6 IS (58ø)	$164.95	$170.00
18-135/3.5-5.6 IS (67ø)	$429.95	$450.00
18-200/3.5-5.6 IS (72ø)	$574.95	$595.00
55-250/4.0-5.6 IS USM (58ø)	CALL	CALL
EF Lenses		
15/2.8	$639.95	$649.95
20/2.8 USM (72ø)	$459.95	$469.95
24/2.8 (58ø)	$319.95	$329.95
28/2.8 (52ø)	$239.00	$242.00
28/1.8 USM (58ø)	$449.00	$459.00
35/2 (52ø)	$294.00	$299.00

	IMP	USA
EF Lenses		
50/1.8 (52ø)	$94.95	$99.95
50/2.5 Macro (52ø)	$259.95	$265.00
50/1.4 USM (58ø)	$339.00	$344.00
MP-E 65/2.8 1x-5x Macro (58ø)	$899.95	$916.00
85/1.8 USM (58ø)	$369.95	$376.00
100/2 USM (58ø)	$424.95	$431.00
100/2.8 USM Macro (58ø)	$509.00	$519.00
135/2.8 (52ø)	$484.00	$494.00
28-135/3.5-5.6 IS USM (72ø)	$399.95	$409.95
70-300/4-5.6 IS USM (58ø)	$519.00	$529.00
70-300/4.5-5.6 DO IS USM (58ø)	$1,229.00	$1,250.00
75-300/4.0-5.6 III (58ø)	$154.95	$159.95
75-300/4.0-5.6 III USM (58ø)	$189.95	$200.00
TS-E MF Lenses		
17/4.0 "L"	$2,179.00	$2,200.00
24/3.5 "L" II	$1,919.00	$1,940.00
45/2.8	$1,210.00	$1,229.00
90/2.8	$1,199.00	$1,210.00
EF "L" Lenses		
14/2.8 USM II	$2,100.00	$2,120.00
24/1.4 II (77ø)	$1,564.00	$1,574.00
35/1.4 USM (72ø)	$1,349.95	$1,369.95
50/1.2 USM (72ø)	$1,449.00	$1,459.00
85/1.2 USM II (72ø)	$1,949.00	$1,970.00

	IMP	USA
EF "L" Lenses		
100/2.8 IS USM Macro (67ø)	—	$944.00
135/2.0 USM (72ø)	$960.00	$980.00
180/3.5 USM Macro (72ø)	$1,360.00	$1,370.00
200/2.8 USM (72ø)	$729.00	$739.00
200/2.0 IS USM (52ø)	$5,199.00	$5,300.00
300/4.0 IS USM (77ø)	$1,230.00	$1,250.00
300/2.8 IS USM (52ø rear)	CALL	CALL
400/5.6 USM (77ø)	$1,180.00	$1,200.00
400/2.8 IS (52ø rear)	CALL	CALL
500/4 IS USM (52ø rear)	$6,049.00	$6,140.00
600/4.0 IS (52ø rear)	$7,900.00	$8,050.00
16-35/2.8 USM II (82ø)	$1,499.00	$1,520.00
17-40/4.0 USM (77ø)	$729.00	$750.00
24-70/2.8 USM (77ø)	$1,280.00	$1,300.00
24-105/4 IS USM (77ø)	$1,049.00	$1,059.00
28-300/3.5-5.6 IS USM (77ø)	$2,399.00	$2,420.00
70-200/4.0 USM (67ø)	$626.00	$636.00
70-200/4.0 IS USM (77ø)	$1,189.00	$1,210.00
70-200/2.8 USM (77ø)	$1,289.00	$1,300.00
70-200/2.8 IS II USM (77ø)	CALL	CALL
100-400/4.5-5.6 IS USM (77ø)	$1,589.00	$1,610.00
1.4x II Teleconverter	$299.00	$309.00
1.4x III Teleconverter	—	$499.99
2x II Teleconverter	$299.00	$309.00
2x III Teleconverter	—	$499.99

USA = Imported & Warrantied by Canon USA **IMP** = Imported & Warrantied by B&H (not qualified for Canon USA Rebates & Warranties)

Canon
580 EX II
Shoe Mount Flash

- Dust- & water-resistance
- Guide No. 190'
- Metal Hot Shoe
- E-TTL II, E-TTL, TTL & Manual
- Bounce & Swivel Head
- Zoom Head (24-105mm)
- Weight 13.2 oz

Canon
10-22mm f/3.5-4.5 EF-S USM
Digital Lens

- *Designed exclusively for Digital SLRs*
- 35mm equivalent 16-35mm
- Min. Focus 9.5"
- 3 aspherical lens elements
- 3.5-27 f/Stop Range
- 77mm filter diameter
- Weight 13.6 oz

Canon
24-70mm f/2.8 EF "L" USM
Zoom Lens

- Sealed and gasketed against dust and moisture
- Internal Focusing
- UD Element
- Two Aspherical Elements
- 2.8-22 f/Stop Range
- Focus 1.25' to Infinity
- 77mm filter diameter
- Weight 33.6 oz

Canon
70-200mm f/2.8 EF "L" IS II USM
Telephoto-Zoom Lens

- Improved Optical Image Stabilization provides up to 4 stops correction
- Min. Focus 3.9'
- Dust- and moisture-resistant
- 77mm filter diameter
- 52.56 oz

Nikon D3000 DSLR

- Self-Cleaning Sensor
- 3" LCD Monitor
- Accepts Nikon AF Lenses (1.5x factor)
- ISO 100-1600
- Fast Shutter Response
- SD, SDHC Card Slot
- In-camera Editing
- 3 fps Burst Mode
- 11-point Autofocus System
- Nikon Inc. limited warranty included

Kit with 18-55mm VR DX.....#NID30001855

10 Mega Pixels

Nikon D3100 DSLR

- HD 1080p Video w/ Sound & Autofocus
- 3" LCD • Live View
- Uses Nikon AF Lenses (1.5x factor)
- SD/SDHC Card Slot
- 11-point Autofocus
- 3 Frames per Second Shooting
- ISO 100 to 3200 (Expand to 12800-Hi2)
- Self Cleaning Sensor
- Nikon Inc. limited warranty included

Kit with 18-55mm VR.....#NID31001855

14 Mega Pixels

Nikon D90 DSLR

- D-Movie mode record 720p HD movie clips
- 3" LCD Monitor • Active D-Lighting
- Uses Nikon AF Lenses (1.5x factor)
- SD/SDHC Card Slot
- In-Camera Image Editing
- Scene Recognition System
- GPS geo-tagging • ISO 100-3200
- Self-Cleaning Sensor • 4.5 fps Burst
- Nikon Inc. limited warranty included

Body Only.....#NID90
Kit with 18-105mm VR.....#NID9018105

12 Mega Pixels

Nikon D7000 DSLR

- EXPEED 2 Image Processor
- 1080p HD Video Capture
- RAW + JPEG Still Image Capture
- 3" LCD Monitor
- Accepts Nikon AF Lenses (1.5x factor)
- Twin SD/SDHC/SDXC Card Slots
- 39-point AF System
- RGB 3D Matrix Metering System
- i-TTL Flash + Speedlight Compatibility
- Nikon Inc. limited warranty included

Body Only.....#NID7000

16 Mega Pixels

Nikon D700 DSLR

- Self Cleaning Sensor • 5 fps Burst
- FX-format CMOS (full frame)
- 3" VGA LCD Monitor • Live View
- 51-point AF System
- Uses Nikon AF Lenses
- CompactFlash Card Slot
- Dust and Water Resistant
- Active D-Lighting Mode
- HDMI Video Out • ISO 6400
- Nikon Inc. limited warranty included

Body Only.....#NID700
Kit with 24-120mm VR.....#NID700024120

12 Mega Pixels

Nikon D3s DSLR

- RAW/JPEGs & 720p HD Video @ 24fps
- FX-format (full-frame) CMOS Sensor
- In-Camera RAW Processing
- 3" 920,000-Dot LCD with Live View
- Compatible with Most Nikkor Optics
- Built Tough, Fully Weathersealed
- ISO Sensitivity up to 102,400
- Buffers Up to 48 RAW or 130 large JPEGs
- Dual CF Card Slots
- Nikon Inc. limited warranty included

Body Only.....#NID3S

12 Mega Pixels

Nikon SLR Lenses and Flashes

Call for Available Rebates

	IMP	USA
AF Flashes		
SB-400	CALL	CALL
SB-700	CALL	CALL
SB-900	CALL	CALL
R1 Wireless Twin Flash	CALL	CALL
R1C1 Wireless Twin Flash System	CALL	CALL
DX ED-IF Lenses for Digital Only		
10.5/2.8 Fish-Eye	$624.95	$679.95
35/1.8 G AF-S (52ø)	$189.95	$194.95
85/3.5 G ED VR Micro (52ø)	$459.95	$476.95
10-24/3.5-4.5 G AF-S (77ø)	$779.95	$799.95
12-24/4 G AF-S (77ø)	CALL	CALL
16-85/3.5-5.6 G AF-S VR (67ø)	$569.00	$619.95
17-55/2.8 G AF-S (77ø)	$1,299.95	$1,359.95
18-55/3.5-5.6 G AF-S II (52ø)	$99.95	$109.95
18-55/3.5-5.6 G AF-S VR (52ø)	$129.95	$179.95
18-105/3.5-5.6 G AF-S VR (67ø)	CALL	$359.95
18-200/3.5-5.6 G AF-S VR II (72ø)	CALL	$759.95
55-200/4-5.6 G AF-S (67ø)	$169.95	$179.95
55-200/4-5.6 G AF-S VR (67ø)	CALL	$219.95
55-300/4.5-5.6 G AF-S VR (58ø)	CALL	$359.95

	IMP	USA
D-Type AF Lenses		
14/2.8 D ED	CALL	$1,649.95
16/2.8 D (39ø) with Hood	$729.95	$919.95
20/2.8 D (62ø)	$529.00	$564.95
24/2.8 D (52ø)	$344.95	$359.95
24/1.4 G AF-S ED (77ø)	$1,929.00	$1,999.00
24/3.5 D ED PC-E (77ø)	$1,799.00	$1,974.95
28/2.8 D (52ø)	$239.95	$259.95
35/2.0 D (52ø)	$309.95	$359.95
35/1.4 G AF-S ED (67ø)	—	CALL
45/2.8 D ED PC-E Micro (77ø)	$1,799.95	$1,849.95
50/1.8 D (52ø)	$114.95	$124.95
50/1.4 D (52ø)	$289.00	$324.95
50/1.4 G AF-S (58ø)	CALL	CALL
60/2.8 D Micro (62ø) (1:1)	$419.95	$459.95
60/2.8 G AF-S ED Micro (62ø)	$479.95	$539.95
85/1.8 D (62ø) with Hood	$389.95	$429.95
85/1.4 D IF (77ø)	$999.95	$1,189.95
85/1.4 G AF-S (77ø)	—	$1,699.95
85/2.8 PC-E Micro (77ø)	$1,719.95	$1,789.95
105/2.8 G AF-S ED-IF VR Micro (62ø)	$799.95	$889.95
105/2.0 DC D with Hood (72ø)	$849.00	$1,079.95
180/2.8 D ED-IF (72ø)	$749.00	$849.95
200/4 D ED-IF Micro w/Case (62ø)	$1,429.00	$1,619.00

	IMP	USA
D-Type AF Lenses		
200/2 G AF-S ED-IF VR (52ø)	CALL	CALL
300/4.0 D AF-S ED-IF (77ø)	$1,099.95	$1,344.95
300/2.8 G AF-S VR (52ø-R)	CALL	CALL
400/2.8 G AF-S VR ED (52ø)	CALL	CALL
500/4.0 G AF-S VR ED (52ø)	CALL	CALL
600/4.0 G AF-S VR ED (52ø)	CALL	CALL
14-24/2.8 G AF-S ED-IF	$1,549.95	$1,784.95
16-35/4.0 G AF-S ED VR (77ø)	$1,039.95	CALL
17-35/2.8 D AF-S ED-IF (77ø)	$1,399.95	$1,699.00
24-70/2.8 G AF-S ED-IF (77ø)	CALL	$1,699.95
24-85/2.8-4.0 D IF (72ø)	$659.95	$679.95
24-120/4.0 G AF-S ED VR (77ø)	$1,159.00	$1,179.95
28-300/3.5-5.6 G AF-S ED VR (77ø)	$944.95	$959.00
70-200/2.8 G AF-S ED-IF VR II (77ø)	CALL	CALL
70-300/4.0-5.6 G (62ø)	$124.95	$149.95
70-300/4.5-5.6 G-AFS VR (67ø)	$449.95	$519.95
80-200/2.8 D with Collar (77ø)	$999.95	$1,099.95
80-400/4.5-5.6 D VR (77ø)	$1,429.95	CALL
200-400/4 G AF-S ED VR II (52ø)	CALL	CALL
TC-14E II (1.4x) Teleconverter	CALL	CALL
TC-17E II (1.7x) Teleconverter	CALL	CALL
TC-20E III (2x) Teleconverter	CALL	CALL

USA = Imported & Warrantied by Nikon USA (AF lenses include 1 year warranty plus 4 years extended service coverage)

IMP = Imported & Warrantied by B&H (not qualified for Nikon USA Rebates & Warranties)

Nikon 24-70mm f/2.8 G AF-S ED-IF Zoom Lens

- Optimized for edge-to-edge sharpness on both the Nikon FX (full-frame) and DX-format image sensors
- Rugged construction, dust and moisture resistance
- Minimum focus 1.2'
- 77mm filter diameter
- Weight 32 oz

Nikon 18-200/3.5-5.6 DX G VR II AF-S ED-IF Digital Lens

- *Designed exclusively for Digital SLRs*
- 35mm equiv. 27-300mm
- **VR II** Vibration Reduction
- SWM (Silent Wave Motor)
- 3.5-22 f/Stop Range
- Focus 1.6' to Infinity
- 72mm filter diameter
- Weight 19.8 oz

Nikon 70-200/2.8 G AF-S ED-IF VR II Telephoto-Zoom Lens

- **VR II** Vibration Reduction
- 3.5-22 f/Stop Range
- SWM (Silent Wave Motor)
- Close Focusing to 4.6'
- 77mm filter diameter
- Weight 3.2 lbs

Nikon SB-900 Speedlight i-TTL Shoe Mount Flash

- Guide No. 131'
- Recycling Time 4.5 Secs
- Bounce & Swivel Head
- Zoom Head (17-200mm)
- Stroboscopic Effect
- AF-Assist Illuminator
- Safety lock on flash shoe
- Weight 14.6 oz

B&H
PHOTO - VIDEO - PRO AUDIO
The Professional's Source™

bhphotovideo.com

800-947-9980
212-444-6666
Fax:
212-239-7770

Quick Dials
Digital SLR's and Accessories.....#64

We Buy, Sell and Trade Used Equipment

Store & Mail Order Hours:
Sunday 10-5 • Mon.-Thurs. 9-7
Friday 9-1 EST/9-2 DST
Saturday Closed

Free Interactive HDSLR GUIDE
bhphoto.com/HDSLRhub

B&H
PHOTO - VIDEO - PRO AUDIO
The Professional's Source™

When in New York,
Visit our SuperStore

420 Ninth Ave.
Corner of 34th Street
New York, N.Y. 10001

- Over 70,000 square feet of the latest gear
- The most knowledgeable Sales Professionals
- Hands-on demos
- Convenient free parking available

Subscribe to our free Catalog
bhphoto.com/catalog
212-444-6633

TAMRON AF LENSES

Six-Year Warranty

Manual Focus Lenses In Stock – Call for Prices

Di – for both digital & film SLR cameras • Di-II – for Digital SLRs Only

C = Canon N = Nikon P = Pentax SM = Sony/Minolta ** Price After Rebate

		SKU #	Available for	Rebate	Price
Di-II	60/2.0 LD IF Macro (55ø)	#TA602DI*	C, N, SM	$100	$424.00**
Di	90/2.8 Macro (55ø)	#TA9028M*	C, N, P, SM	$50	$449.00**
Di	180/3.5 LD IF Macro (72ø)	#TA18035*	C, N, SM	$50	$689.00**
Di-II	10-24/3.5-4.5 (77ø)	#TA102435*	C, N, P, SM	$50	$449.00**
Di-II	17-50/2.8 XR LD IF Aspherical (67ø)	#TA175028*	C, N, P, SM	$25	$474.00**
Di-II	17-50/2.8 XR VC LD IF Asph. (67ø)	#TA175028*Q	C, N	$50	$599.00**
Di-II	18-200/3.5-6.3 (62ø)	#TA1820035*	C, N, P, SM	$60	$239.00**
Di-II	18-250/3.5-6.3 (62ø)	#TA1825035*	C, N	—	$299.00
Di-II	18-270/3.5-6.3 VC (72ø)	#TA1827035*	C, N	$150	$479.00**
Di	28-75/2.8 XR (67ø)	#TA287528*	C, N, P, SM	—	$499.00
	28-80/3.5-5.6 (58ø)	#TA288035*	C, N, P, SM	—	$89.00
Di	28-300/3.5-6.3 XR LD (62ø)	#TA2830035XD*	C, N, P, SM	—	$419.00
Di	28-300/3.5-6.3 XR VC (62ø)	#TA2830035*	C, N	—	$629.00
Di-II	55-200/4-5.6 LD Macro (52ø)	#TA552004*	C, N, SM	—	$199.00
Di	70-200/2.8 LD IF Macro (77ø)	#TA7020028M*	C, N, P, SM	—	$769.00
Di	70-300/4-5.6 VC USD	#TA70300*	C, N, SM	$50	$399.00**
	75-300/4.0-5.6 LD (62ø)	#TA753004*	C, N, P, SM	—	$164.00
Di	200-500/5-6.3 LD IF (86Cø)	#TA2005005*	C, N, SM	—	$949.00

Tokina AF LENSES

DX – for Digital SLRs Only FX – Designed for full frame DSLRs

** Also Available for Sony Alpha DSLR

		Canon EOS	Nikon AF	Price
DX	35/2.8 Pro Macro (55ø)	#T03528PDXC	#T03528PDXN	$279.00
DX	10-17/3.5-4.5 ATX Fisheye	#T0101735CAF	#T0101735NAF	$579.95
DX	11-16/2.8 Pro (77ø) **	#T0111628PDXC	#T0111628PDXN	$599.95
DX	12-24/4.0 Pro II (77ø)	#T012244DXC	#T012244DXN	$499.95
FX	16-28/2.8 Pro (77ø)	#T0162828FXC	#T0162828FXN	$849.00
DX	16-50/2.8 Pro (77ø)	—	#T0165028DXNA	$549.00
DX	16.5-135/3.5-5.6 (67ø)	#T016.513535C	#T016.513535N	$449.00

FLASHES

Metz

28 AF-3 TTL Digital Shoe Mount Flash	$108.00
28 CS-2 Digital Slave Shoe Mount Flash	$126.00
50 AF-1 TTL Shoe Mount Flash f/Canon or Nikon	$230.00
54 MZ-4 TTL Standard Shoe Mount Flash	$351.00
58 AF-2 TTL Shoe Mount Flash f/Canon or Nikon	$400.00
45 CL-4 TTL Handle Mount Flash Kit**	$680.00
76 MZ-5 TTL Handle Mount Flash**	$1,026.00

** with battery and charger

QUANTUM

Q-flash TRIO	$875.00
Q-flash T5D-R	$673.00
Q-flash T5D-R with Turbo Battery	$1,081.95
Q-flash T5D-R with Turbo Compact Battery	$1,096.95

Batteries

Battery 1 Compact			$124.95
Battery 1	$214.95	Turbo Battery	$408.00
Turbo SC Compact with Charger			$444.00
Turbo Blade	$444.00	Turbo 3	$595.00

SUNPAK

RD-2000 Shoe Mount Flash	$59.95
PZ-4000 AF TTL Shoe Mount Flash	$109.95
PF-30x TTL Shoe Mount Flash for Nikon, Canon	$59.95
PZ-40x II AF TTL Shoe Mount Blk f/Canon, Nikon	$131.95
PZ-42x II AF TTL Shoe Mount for Canon, Nikon	$139.99
622 Super Pro TTL Handle Mount Flash	$196.95
622 Super Pro TTL Kit with Wide Angle Head	$249.95

Vivitar

285HV Professional Auto	$89.95
Pearstone SB-4 AC Adapter f/285HV #PESB4	$14.95

SIGMA AF LENSES & FLASHES

Perfecting The Way Photographers Work
All Sigma cameras, lenses & flashes are made exclusively in Japan.

DC – for Digital SLRs Only • DG – Optimized for Digital SLRs

H – HSM Model with Canon, Nikon, Sigma
R – Rear Slip-in Gelatin Filter Slot

		Canon	Nikon	Olympus	Pentax	Sigma	Sony/Minolta	Price
DC	4.5mm f/2.8 EX Circular Fisheye HSM R	#SI4528EXDCC	#SI4528EXDCN	—	#SI4528EXDCP	#SI4528EXDCSI	#SI4528EXDSO	$999.00
DG	8/3.5 EX Circular Fish-Eye R	#SI835CA	#SI835NA	—	—	#SI835SI	—	$899.00
DC	10mm f/2.8 EX Fisheye HSM R	#SI1028EXDCC	#SI1028EXDCN	—	#SI1028EXDCP	#SI1028EXDCSI	#SI1028EXDCSO	$649.00
DG	15/2.8 EX Diagonal Fish-Eye R	#SI1528DGCAF	#SI1528DGNAF	—	#SI1528DGPAF	#SI1528DGSA	#SI1528DGMAF	$609.00
DG	20/1.8 EX DF RF Aspherical (82ø)	#SI2018CAF	#SI2018NAF	—	#SI2018PAF	#SI2018SA	#SI2018MAF	$519.00
DG	24/1.8 EX DF Aspherical Macro (77ø)	#SI2418MCAF	#SI2418MNAF	#SI2418MOAF	#SI2418MPAF	#SI2418MSA	#SI2418MMAF	$449.00
DG	28/1.8 EX DF Aspherical Macro (77ø)	#SI2818MCAF	#SI2818MNAF	—	#SI2818MPAF	#SI2818MSA	#SI2818MMAF	$349.00
DC	30mm f/1.4 EX HSM (62ø)	#SI3014DCCAF	#SI3014DCNAF	#SI3014DCOAF	#SI3014DCPAF	#SI3014DCSA	#SI3014DCMAF	$439.00
DG	50mm f/1.4 EX (77ø) R	#SI5014C	#SI5014N	#SI5014OL	#SI5014PE	#SI5014SI	#SI5014SOM	$499.00
DG	50/2.8 EX Macro (55ø)	#SI5028MDGCAF	#SI5028MDGNAF	—	#SI5028MDGPAF	#SI5028MDGSA	#SI5028MDGMAF	$299.00
DG	70/2.8 EX Macro (62ø)	#SI7028MDGCA	#SI7028MDGNA	—	#SI7028MDGPA	#SI7028MDGSA	#SI7028MDGSAQ	$499.00
DG	85/1.4 EX HSM (77ø)	#SI8514C	#SI8514N	—	#SI8514P	#SI8514SI	#SI8514S	$899.00
DG	105/2.8 EX Macro (58ø)	#SI10528MDGCA	#SI10528MDGNA	#SI10528MDGOA	—	#SI10528MDGSA	#SI10528MDGMA	$479.00
DG	150/2.8 EX APO Macro HSM (72ø)	#SI15028AMDGC	#SI15028AMDGN	#SI15028AMDGO	—	#SI15028AMDGS	—	$729.00
DG	300/2.8 APO EX HSM	#SI30028DGCAF	#SI30028DGNAF	—	#SI30028DGPAF	#SI30028DGSA	#SI30028DGMAF	$2,999.00
DC	8-16/4.5-5.6 HSM	#SI8164556CA	#SI8164556NI	—	#SI8164556PE	—	#SI8164556SO	$899.00
DC	10-20/4-5.6 EX HSM (77ø)	#SI102045DCAF	#SI102045DNAF	#SI102045DOLP	#SI102045DPAF	#SI102045DSA	#SI102045DMAF	$479.00
DC	10-20/3.5 EX HSM (82ø)	#SI102035C	#SI102035N	—	#SI102035P	#SI102035SG	#SI102035S	$649.00
DG	12-24/4.5-5.6 EX R*	#SI122445CAF	#SI122445NAF	—	#SI122445PAF	#SI122445SA	#SI122445MAF	$859.00
DC	17-50/2.8 EX OS (77ø)	#SI175028CA	#SI175028NI	—	#SI175028PE	—	#SI175028SO	$669.00
DC	17-70/2.8-4.0 OS Macro HSM (72ø)	#SI177028DCC	#SI177028DCNQ	—	#SI177028DCP	#SI177028DCSI	#SI177028DCSM	$449.00
DC	18-50/2.8-4.5 OS (67ø)	#SI185028DOC	#SI185028DON	—	#SI185028DOP	#SI185028DOSG	#SI185028DOS	$199.00
DC	18-125/3.8-5.6 OS (Optical Stabilizer) (67ø) R	#SI18125350SC	#SI18125350SN	—	#SI18125350SP	#SI18125350SI	#SI18125350SS	$339.00
DC	18-200/3.5-6.3 IF Aspherical (62ø)	#SI1820035CAF	#SI182003583N	—	#SI1820035PAF	#SI1820035SA	#SI1820035MAF	$249.00
DC	18-200/3.5-6.3 OS (Optical Stabilizer) (72ø)	#SI1820035C	#SI1820035N	—	—	#SI1820035S	—	$369.00
DC	18-250/3.5-6.3 OS HSM (72ø)	#SI1825035C	#SI1825035N	—	#SI1825035CP	#SI1825035S	#SI1825035CSN	$479.00
DG	24-70/2.8 EX Aspherical (82ø)	#SI247028DGCA	#SI247028DGNA	—	#SI247028DGPA	#SI247028DGSS	#SI247028DGMA	$569.00
DG	24-70/2.8 EX IF HSM (82ø)	#SI247028C	#SI247028NF	—	#SI247028PS	#SI247028S	#SI247028SM	$899.00
DC	50-200/4-5.6 OS HSM (55ø)	#SI5020045DOC	#SI5020045DON	—	#SI5020045DOP	#SI5020045DSG	#SI5020045DOS	$159.00
DG	50-500/4.5-6.3 APO OS HSM (95ø)	#SI505004563C	#SI505004563N	—	#SI505004563P	#SI505004563SA	#SI505004563SM	$1,599.00
DG	70-200/2.8 EX Macro II HSM (77ø)	#SI7020028C	#SI7020028N	—	#SI7020028PSA	#SI7020028S	#SI702002BSO	$799.00
DG	70-200/2.8 EX OS HSM (77ø)	#SI7020028CQ	#SI7020028NI	—	#SI7020028P	—	#SI7020028SOQ	$1,699.00
DG	70-300/4-5.6 DL Macro Super II (58ø)	#SI703004SCAF	#SI70300456N	—	#SI703004PAF	#SI703004SA	#SI703004MAF	$159.00
DG	70-300/4-5.6 APO Macro Super II (58ø)	#SI703004DGCA	#SI70300456AN	—	#SI703004DGPA	#SI703004DGSA	#SI703004DGMA	$209.00
DG	70-300/4-5.6 OS (62ø)	#SI7030045C	#SI7030045N	—	#SI7030045P	#SI7030045S	#SI7030045SM	$399.00
DG	150-500/5-6.3 APO OS HSM	#SI150500C	#SI150500N	—	#SI150500P	#SI150500S	#SI150500M	$999.00
DG	300-800/5.6 APO EX HSM	#SI300800DGCA	#SI300800DGNA	#SI300800DGOA	—	#SI300800DGSA	—	$7,999.00
DG	1.4x EX APO Tele-Converter	#SI1.4XDGCAF	#SI1.4XDGNAF	—	#SI1.4XDGPAF	#SI1.4XDGSA	#SI1.4XDGMAF	$249.00
DG	2x EX APO Tele-Converter	#SI2XDGCAF	#SI2XDGNAF	—	#SI2XDGPAF	#SI2XDGSA	#SI2XDGMAF	$299.00
DG	EF-530 Super Flash	#SIEF530C	#SIEF530N	—	#SIEF530P	—	#SIEF530SM	$199.00
DG	EM-140 TTL Ringlight	#SIEM140DGC	#SIEM140DGN	—	#SIEM140DGP	#SIEM140DGS	#SIEM140DGM	$379.00

SIGMA
18-200mm f/3.5-6.3 DC OS Digital Lens

- *Designed exclusively for Digital SLRs*
- Focus 1.5' to infinity
- Mag. ratio of 1:3.9
- 72mm filter diameter
- Weight 21.6 oz

SIGMA
17-50mm f/2.8 EX DC OS Digital Lens

- *Designed exclusively for Digital SLRs*
- Minimum focus: 11"
- Optical Image Stabilization (OS)
- 77mm filter diameter
- Weight: 19.9 oz

TAMRON
60mm f/2.0 LD IF Macro Di-II Digital Lens

$100 Rebate

- *Designed exclusively for Digital SLRs*
- Minimum Focus 9.1"
- 55mm filter diameter
- Weight 14.1 oz

Tokina
11-16mm f/2.8 Pro DX AT-X Fisheye Digital Lens

- *Designed exclusively for Digital SLRs*
- WR (Water Repellent) coating
- Minimum Focus 1'
- Magnification ratio 1:11.6
- Weight 1.2 lb

BAGS & CASES

DPS 3N1 Sling/Backpacks

3N1 bags provides fast equipment access and ultimate freedom allowing 3 carrying options in one while morphing from sling to backpack and back again fast and easy.

	10 Small	20 Med.	30 Large
SKU #	#KA31SBS	#KA31SBM	#KA31SBL
Color	Black	Black	Black
HOLDS SLRs	1	1	1
Lens/Flash	2	4	6
Accessories	Yes	Yes	Yes
Price	**$89.98**	**$99.90**	**$129.90**

Lowepro Fastpack Backpacks

Protects your equipment and provides storage for accessories. Side-entry compartments let you quickly access gear and accessories, even while you're on the move.

	200	250	350
SKU #	#LOFP200*	#LOFP250*	#LOFP350*
Color	Black, Blue, Red		
HOLDS SLRs	1	1	1
Lens/Flash	3	4	4
Laptop	No	15.4"	17.4"
Price	**$74.95**	**$89.95**	**$112.95**

tamrac Aero Backpacks

Speed Pack's Dual Entry System allows camera access via side door or front panel. Weatherproof exterior and foam padded interior compartments for a custom equipment fit.

	Speed Pack 75	Speed Pack 85
SKU #	#TA3375*	#TA3385*
Color	Black, Rust	
HOLDS SLRs	1	1
Lens/Flash	3	4
Laptop	No	17"
Price	**$99.99**	**$129.99**

TRIPODS

GITZO Explorer Series

Six Layer, pultrusion (spun), 100% carbon fiber tubes, "G Lock" leg locks. Legs and center column. Can beloched at a wide range of angles making it the perfect wilderness field tripod. Requires Head.

	GT2531EX	GT2541EX
SKU #	#GIGT2531EX	#GIGT2541EX
Load Capacity	26.4 lbs	26.5 lbs
Max. Height	66.9"	64.6"
Folded Length	25.2"	21.3"
Weight	4.1 lbs	4.1 lbs
Price	**$674.90**	**$724.90**

Manfrotto 190X Series

Improved castings for reduced weight without compromising strength and stability. XB feature slow angle adapter, XProB features vertical/horizontal quick flip center column. Requires Head.

	190XDB	190XB	190XPROB
SKU #	#MA190XDB	#MA190XB	#MA190XPROB
Load Capacity	11 lbs	11 lbs	11 lbs
Max. Height	57.5"	57.1"	57.5"
Folded Length	21"	20.9"	22.4"
Weight	3.5 lbs	4 lbs	4 lbs
Price	**$104.90**	**$139.90**	**$149.90**

Manfrotto 055X Series

Similar in design and features to the 190X series but with increased operating height & max load capacity. 055XB features low angle adapter, 055XproB features vertical/horizontal quick flip center column. Requires Head.

	055XDB	055XB	055XPROB
SKU #	#MA055XDB	#MA055XB	#MA055XPROB
Load Capacity	15.4 lbs	15.4 lbs	15.4 lbs
Max. Height	70"	70"	70.3"
Folded Length	24"	24"	25.7"
Weight	4.6 lbs	5 lbs	5.3 lbs
Price	**$149.90**	**$174.90**	**$179.90**

FILTERS

Same-Day Filters in stock

HOYA

B&H SPECIAL! Buy 3 or more Hoya Filters & Get 10% Off

	52mm	58mm	67mm	72mm	77mm
UV, Skylight (1B)	$13.35	$14.85	$22.35	$34.35	$38.85
UV, Skylight (1B) HMC	$19.35	$22.35	$32.85	$40.35	$49.35
UV, Skylight (1B) Super HMC	$26.85	$35.85	$41.85	$52.35	$56.85
Circular Polarizer	$35.89	$40.35	$58.35	$70.35	$82.35
Circular Polarizer HMC	$70.35	$76.35	$92.85	$130.35	$169.35
Circular Polarizer Ultra Thin Super HMC	$74.85	$83.85	$101.85	$149.85	$187.35
"Moose" Warm Circular Polarizer	$50.85	$59.85	$86.85	$107.85	$128.85
80A, B, C, 81A, B, C, 82A, B, C, 85, B, C	$17.85	$20.85	$32.35	$40.35	$49.35
K2 Yel, X0 Yel/Grn, Grn X1, Or G, Red 25A	$17.85	$20.85	$32.85	$40.39	$49.35
K2 Yel, X0 Yel/Grn, Grn X1, Or G, Red 25A HMC	$23.89	$26.85	$38.85	$46.35	$56.85
Close Up Set	$40.35	$49.35	$68.85	$88.35	$97.35
Intensifier - Blue, Green Field, Enhancement (Red)	$38.35	$49.35	$62.85	$70.35	$83.85
Neutral Density 2x, 4x, 8x	$17.85	$20.85	$32.85	$40.35	$49.35
Neutral Density 2x, 4x, 8x HMC	$23.85	$26.85	$38.85	$46.35	$56.85
Star 6, Star 8	$23.85	$26.85	$40.35	$46.35	$53.85

heliopan

Made exclusively with glass from Schott (Zeiss) the world's finest optical glass supplier.

	55mm	58mm	67mm	72mm	77mm
Skylight (1B), UV	$39.99	$41.99	$62.99	$77.99	$89.99
Skylight (1B), UV SH-PMC	$72.99	$78.99	$103.99	$131.99	$157.99
Circular Polarizer	$109.99	$116.99	$145.99	$173.99	$187.99
Circular Polarizer SH-PMC	$155.99	$165.99	$206.99	$233.99	$261.99
#5, #8, #11, #13, #15, #22, 81A, 81B, 81C	$49.99	$51.99	$78.99	$96.99	$108.99
Digital Filter	$176.99	$180.99	$222.99	$261.99	$301.99

B+W

B&H SPECIAL! Buy 3 or more B+W Filters & Get 5% Off

	55mm	58mm	67mm	72mm	77mm
UV	$21.00	$23.00	$33.50	$42.00	$47.50
UV Multi-Coated	$38.50	$38.50	$52.00	$64.50	$88.00
Circular Polarizer	$63.00	$65.00	$81.50	$93.50	$105.00
Circular Polarizer Multi-Coated	$90.00	$93.50	$117.00	$134.50	$160.50
81A, B, KR3, 6, 12, 15	$26.50	$26.50	$36.00	$42.00	$49.00
KB1.5, 3, 6, 12, 15, 20	$28.50	$28.50	$35.00	$40.50	$47.50
#021, 023, 041, 060, 061, 090	$24.50	$24.50	$36.00	$42.00	$49.00
Graduated (N.D. & Colors)	$46.50	$47.50	$58.50	$68.00	$82.50
ND .9, 1.8, 3.0, 4.0, 6.0	$42.00	$42.00	$67.50	$84.00	$94.50
Close-Up Lenses 0.25 - 5.0	$24.50	$24.50	$36.00	$42.00	$49.00

TIFFEN

Ten-Year Warranty Made in USA — Multicoated Filter Technology

Digital Essentials Kits In Stock

DIGITAL HT FILTERS

	52mm	58mm	62mm	72mm	77mm
812 Warming	$64.95	$74.95	$99.95	$109.95	$129.95
Grad ND 0.6	$74.95	$84.95	$109.95	$119.95	$139.95
Circular Polarizer	$109.95	$129.95	$159.95	$199.95	$219.95
Ultra Clear	$49.95	$59.95	$69.95	$74.95	$79.95
Haze 86	$54.95	$64.95	$74.95	$84.95	$99.95
ND 1.2	$64.95	$74.95	$99.95	$109.95	$129.95
ND 0.6	$64.95	$74.95	$99.95	$109.95	$129.95
Soft FX3	$74.95	$84.95	$109.95	$119.95	$139.95
Star 4 pt 2	$64.95	$74.95	$99.95	$109.95	$129.95

FILM – B&W AND COLOR

COLOR PRINT FILM

Kodak

	Gold GA 100	Gold GB 200	Gold Max GC 400
135-24	2.19	2.49	1.99
135-36	2.79	—	2.99

	Portra 160NC	Portra 160VC	Portra 400	Portra 400VC	Ektar 800	Ektar 100
135-36	5.49	5.79	5.99	5.99	9.50	4.35
120 Roll	3.69	3.99	4.89	4.30	5.99	3.69
220 PP (5)	49.50	—	49.95	—	—	—

IMP Imported from Europe

USA Manufactured in USA for Domestic Distribution

FUJIFILM

Superia	CA 200	CH 400
135-36	1.99	1.99
120 Roll	—	—

Pro	160S	400H
135-36	4.99	6.89
120 Roll	—	5.09
220 Roll	7.95	—

PROCESSING MAILERS

Fuji Slide Processing

36 Exposures (35mm) 9.49

Processing

	35mm	120	220
Slide E6	9.49	9.49	18.95
Print C41	13.49	15.49	30.95
B&W	16.75	16.75	—

COLOR SLIDE FILM

Kodak

Ektachrome Professional E Series

	100 VS	100 G	200
135-36	6.99	7.50	9.95
120 Roll	5.25	5.59	—
220 PP (5)	54.95	—	—

FUJIFILM

	Fujichrome Sensia RA 100	Velvia RVP Pro 50	Velvia RVP 100	Fujichrome Professional Astia RAP100F	Provia RDP100F	Provia RXP @ 400X
135-36	4.79	6.95	5.99	7.55	6.69	9.89
120 Roll	—	5.99	—	—	—	5.95
220 Roll	—	—	—	10.99	—	—

BLACK & WHITE PRINT FILM

Kodak

	Plus-X 125	Tri-X 400	TMX 100	TMY 400	TMZ 3200	BW 400 CN
135-36	4.49	3.45	3.99	3.75	6.99	5.25
120 Roll	4.75	3.75	3.95	3.59	—	—

ILFORD

	Pan F+ 50	FP4+ 125	HP5+ 400	Delta Pro 100	Delta Pro 400	Delta Pro 3200
135-36	5.49	5.09	3.89	5.31	5.52	7.07
120 Roll	4.21	3.69	3.58	3.90	3.98	4.25

FUJIFILM

	XP-2 Super 400	Infrared SFX 200	Acros 100	Neopan 400
135-36	5.64	6.79	3.99	4.50
120 Roll	4.11	6.95	3.54	—

AGFA

	SLIDE Scala 200
135-36	7.99
120 Roll	—

B&H PHOTO - VIDEO - PRO AUDIO

The Professional's Source™

bhphotovideo.com

800-947-9980
212-444-6666
Fax:
212-239-7770

Quick Dials

Bag and Cases ..... #73
Tripods ..... #73
Filters ..... #73
Film/Processing ..... #71

We Buy, Sell and Trade Used Equipment

Store & Mail Order Hours:
Sunday 10-5 • Mon.-Thurs. 9-7
Friday 9-1 EST/9-2 DST
Saturday Closed

Free Interactive HDSLR GUIDE

bhphoto.com/HDSLRhub

www•CAMBRIDGEWORLD•com

New, Used, Refurbished, Preowned Collectables At Discounted Prices
We Buy, Trade, Export, Import Anything Photographic, Online Sales & Wholesale

1-800-221-2253 • 1-718-858-5002 • 1-212-675-8600

"WELL PACKAGED, ITEM AS DESCRIBED, PROMPT SHIPMENT, GOOD COMMUNICATION."
CARL S. - EL PASO, TEXAS
Please see website for more testimonials.

WE WILL BEAT AND MEET DISCOUNT PRICES!
CALL OR EMAIL US AND WE WILL SAVE YOU $$$$$$$$$$$$$$$$$"

MORE THAN **50** YEARS OF EXPERIENCE

email: Sales@CambridgeWorld.com

DIGITAL CAMERAS,
LENSES, FLASHES, SCREENS PAPER AND ACCESSORIES

Canon, Casio, Fuji, Hasselblad, Kodak, Leica, Mamiya, Nikon, Olympus, Panasonic, Pentax, Polaroid, Samsung, Sanyo, Sigma, Sony, Vivitar, Etc -

Memory Cards - Delkin, Kington, Lexar, SanDisk, Fuji, Olympus, Sony, Panasonic, Etc..... **CALL**

Large selection of BATTERIES available at discount prices....CALL

ASK
IF YOU DO NOT SEE IT, IT DOESN'T MEAN WE DO NOT HAVE IT,
1-800-221-2253

SELL TO US!!
WE PAY FOR YOUR RETIRED GEAR!

TOP DOLLAR$$$
Nothing is too Small or too Large Anything Photographic !!!!!
Estate Sales Welcome!!! You can mail your gear or we can pick your gear up. You can trade-in your gear or we will pay you with a check or with Paypal. CALL 1-800-221-2253 and ask for Simon Or Email us at sales@cambridgeworld.com
Send your equipment for a FREE evaluation to: Cambridge World 34 Franklin Ave., Brooklyn, New York 11205

LARGE SELECTIONS OF NEW AND USED CLASSIC CAMERAS
LENSES AND ACCESSORIES IN STOCK AT LOW DISCOUNT PRICES!
Agfa, Alpa, Ansco, Bolex, Bronica, Canon, Contax, Contarex, Edixa, Exakta, Fuji, Gami, Hasselblad, Kodak, Konica, Kowa, Leica, Leitz, Linhof, Mamiya, Minolta, Minox, Miranda, Nikon, Nikonos, Olympus, Pentacon, Pentax, Petri, Plaubel, Polaroid, Praktica, Praktina, Retina, Robot, Rollei, Rolleiflex, Sea & Sea, Stereo Realist, Tessina, Topcon, Voigtlander, Yashica, Zeiss, Etc.

NEW SPECIALS

500mm f8 Vivitar Mirror lens	149.00
135mm F3.5 Schneider tele xenar	149.99
200mm F3.5 ALPA telephoto lens	199.99
0.42x Wide angle fisheye lens	29.99
0.45x Wide angle lens	24.99
MACRO CLOSE UP FLASH RING LIGHT	99.95
MINOLTA MAXXUM 35-70mm F3.5 ZOOM	69.95
MINOLTA MAXXUM 80-200mm 4.5 ZOOM	99.95
NOVOFLEX Adapters Lenses Accessories	CALL
PENTAX AUTO A110TELECONVERTER LENS	69.95
Topcon super D RE accessory shoe	29.99
TOPCON Lenses & Accessories	CALL
EXAKTA Lenses & Accessories	CALL
Reversing Rings 9.99 Bellows extension	99.99
Extension tube set 39.99 Rubber eyecup	9.99
Bronica electronic flash	39.99
Camera Wide neck strap	4.99
1.5x C mount teleconverter lens	29.99
Slide duplicator	49.99
WINDER, MINOLTA, CANON, NIKON OLYMPUS PENTAX	49.95
ROLLEI ROLLEIFLEX FILTERS	3995

Many more available...CALL

REPAIR
AT DISCOUNT PRICES!
Send your equipment for a FREE repair estimate to: Cambridge World 34 Franklin Ave., Brooklyn, New York 11205

USED DEPARTMENT
We have more than 30,000 Used items. Email us your Wish List at sales@cambridgeworld.com or CALL 1-800-221-2253 and we will assist you and SAVE you $$$$$$. No item is too small or large. Listing is very partial.

Bronica S2A, EC	Call	Bronica GSI	399.50
Bronica ETR	99.95	Bronica SQ camera	199.99
Canon A2E	79.99	Canon 1V	499.99
Canon Elan 7E	49.99	Canon 1X	69.99
Canon rebel 2000	89.99	Canon Elan	89.99
Canon F1	119.99	Canon VT	299.99
Canon rebel XT	299.99	Canon XTL	399.99
Contax G2	699.99	Contax N1	349.99
Contax RTS III	699.99	Exakta RTL	149.99
Exakta VX	99.99	Fuji Digital S3	599.95
Fuji S5 digital	799.95	Exakta VX 1000	129.50
Hasselblad 500C	149.99	Hasselblad 503CW	499.95
Kodak Retina IIIc	99.95	Retina Reflex	99.99
Leica IF	499.99	Leica IIIG	699.99
Leica IIIF	299.99	Leica M3	499.99
Leica R3	199.99	Leica R8	749.99
Mamiya RB67	199.99	Minolta X700	99.99
Minolta XTi	99.95	Maxxum HTsi	69.99
Maxxum 7000	49.95	Maxxum 5000	39.95
Maxxum 9000	69.95	Maxxum 7001	119.95
Maxxum 5D	199.95	Maxxum 7D	299.99
Nikkormat FTN	99.95	Nikkormat FT2	119.94
Nikon F	99.99	Nikon F2	119.99
Nikon FA	169.99	Nikon F100	199.99
Nikon F3	129.99	Nikon FM10	129.99
Nikon F5	349.99	Nikon D40	199.99
Nikon D200	699.99	Nikon N55	66.99
Nikon N90	99.99	Nikon N8008	79.95
Nikonos V	179.99	Nikonos II	79.95
Olympus OM1	129.99	Olympus OM4	179.99
Pentax K1000	99.99	Pentax LX	299.99
Pentax 645	249.99	Rollei 35M	119.99
Rolleicord V	149.99	Rolleiflex F3.5	499.99
Topcon super RE	249.99	Topcon IM	79.95
Voigtlander Bessa	599.99	Vitomatic II	99.95
Voigtlander Ressomatic	129.99	Vitessa	99.95
Yashica FX3	89.99	Yashica FR1	69.95
Zeiss Contarex	299.99	Zeiss Icarex	149.99
Canon 1D	1,999.00	Nikon 3PT	369.50
Canon 40D	899.00	Nikon FM 3A	399.00
Contax Aria	299.95	Nikon F4	299.00
Ekakta 66	999.99	Nikon D300	1,099.00
Leica M6	999.99	Nikon D200	499.00
Minolta SRT 101	69.95	Olympus E-520	249.00

Canon 24mm F1.4 USM	989.00
Canon 50mm F1.4 USM	229.00
Canon 85mm F1.2 USM	1,299.00
Canon 300mm F2.8 USM	2,199.00
Canon 16-35mm F2.8 USM	889.00
Canon 24-105mm F4 USM	789.00
Canon 28-300mm F3.5-5.6 USM IS	1,299.00
Canon 70-200mm F2.8 USM IS	1,199.00
Canon 100-400mm F4.5-5.6 USM IS	1,199.00
Canon 430EX Speedlite	189.00
Canon 580EX Speedlite	269.00
Canon 24-70mm F2.8 USM	899.95
Contax 50mm F1.4 Zeiss Planar	209.00
Contax 80-200mm F4 Vario sonnar	199.00
Hasselblad 150mm F4 sonnar	299.00
Leica 35mm F2 Summicron M	899.00
Leica 50mm F2 Summicron M	399.00
Leica 135mm F4.5 Hektor Screw	129.00
Leica 50mm F2 Summicron R	349.50
Mamiya 55mm F2.8 F/645	99.00
Mamiya 180mm F4.5 RZ	349.00
Minolta 50mm F1.7	19.00
Minolta 80-200mm F4.5-5.6	69.00
Minolta 5400HS flash	79.00
Minolta Maxxum 50mm F1.7 AF Lens	69.95
Nikon 50mm F1.4 Nikkor	69.00
Nikon 18-200mm F3.5-5.6 Zoom	349.00
Nikon 80-200mm F2.8 Zoom	399.00
Nikon SB600 Speedlite	269.00
Nikon SB900 Speedlite	349.00
Olympus 50mm F1.8 Zuiko	39.00
Olympus 70-210mm F4.5 AF Zuiko	99.00
Olympus 50mm F1.8 Zuiko Lens	49.95
Panasonic 14-50mm F2.8-3.5 Zoom	479.00
Pentax 28-80mm F3.5-4.5 Zoom	39.00
Pentax 35-80mm F4-5.6 Zoom	44.00
Sigma 70mm F2.8 macro	379.00
Sony 16-80mm F3.5-4.5 Zeiss sonar	499.00
Sony 55-210mm F4-5.6 Zoom	99.00
Vivitar 500mm F8 mirror lens	69.00
Vivitar 283 Flash	29.95
2X Teleconverter Extended Lens	29.95
3X Teleconverter Extended Lens	39.95

LENSES
We Offer MORE THAN 1,000 DIFFERENT LENSES at LOW DISCOUNT PRICES!!!
Canon, Nikon, Pentax, Olympus, Leica, Sony, Minolta, Vivitar, Schneider, Mamiya, Hasselblad, Rodenstock, Zeiss, etc.

SIGMA

Sigma SD15, SD10 and SD9 Digital SLR	CALL		
Sigma SA7 and SA9 Film SLR Cameras	CALL		
Sigma DP1 Digital Camera Outfit	548.95		
Sigma DP2 Digital Camera Outfit	628.95		
4.5mm F2.8	898.95	50mm F1.4	468.95
8mm F3.5	828.95	50mm F2.8	234.95
10mm F2.8	598.95	70mm F2.8	468.95
15mm F2.8	568.95	105mm F2.8	458.95
20mm F1.8	468.95	150mm F2.8	688.95
24mm F1.8	398.95	180mm F3.5	728.95
28mm F1.8	308.95	300mm F2.8	2698.95
30mm F1.4	348.95	500mm F4.5	4298.95
60mm F2.8	278.95	10-20mm F4-5.6	444.95
85mm F1.4	848.95	10-20mm F3.5	598.95
800mm F5.6	5698.95	17-70mm F2.8-4.5	408.95
12-24mm F4.5-5.6	798.95	18-50mm F3.5-5.6	99.95
18-50mm F2.8-4	188.95	18-200mm F3.5-5.6	238.95
18-50mm F2.8	378.95	18-250mm F3.5-5.6	448.95
18-125mm F3.8-5.6	318.95		
8-16mm F4.5-5.6 DC	648.95	24-70mm F2.8	518.95
17-50mm F2.8 EX DCOS HSM	618.95		
28-70mm F2.8-4	88.95	28-70mm F2.8	318.95
28-200mm F3.5-5.6	174.95	28-300mm F3.5-6.3	234.95
35-135mm F4-5.6	99.95	50-150mm F2.8	698.95
50-200mm F4-5.6	148.95	55-200mm F4-5.6	124.95
50-500mm F4-6.3	948.95	70-300 F4-5.6	148.95
70-200mm F2.8	748.95	70-300mmDGOS	368.95
70-300 F4-5.6 APO	188.95	100-300mm F4-5.6	99.95
70-200mm F2.8 EX OS HSM	1488.95		
100-300mm F4	1098.95	120-300mm F2.8	2698.95
120-400 F4.5-5.6	828.95	150-500mm F5-6.3	938.95
200-500mm F2.8 APO EX DG	25998.95		
300-800mm F5.6 EX DE HSM	7798.95		
1.4X APO	218.95	2X APO	278.95

TOKINA

35mm F2.8	438.95	100mm F2.8	384.95
10-17mm F3.5-4.5	444.95	500mm F8	229.95
11-16mm F2.8	564.95	28-200mm F3.5-5.6	99.95
12-24mm F4	424.95	50-135mm F2.8	674.95
16-50mm F2.8	394.95	70-210mm F4-5.6	89.95
16.5-135mm F3.5-5.6	424.95	80-400mm F4.5-5.6	638.95

KENKO TELECONVERTER
1.5X.....84.95 2X.....129.95 3X.....219.95

LENSES FOR MOST MANUAL & AUTOFOCUS AF CAMERAS

8mm F3.5	279.95	14mm F2.5	198.95
24mm F2.8	79.95	135mm F3.5	29.95
28mm F2.8	49.95	135mm F2.8	49.95
35mm F2.8	39.95	200mm F3.5	79.95
50mm F1.8	69.95	300mm F5.6	99.95
50mm F1.4	189.95	400mm F6.3	99.95
85mm F1.4	308.95	500mm F8	99.95
100mm F3.5	119.95	500mm F6.3	124.95
800mm F8	219.95	100mm F11	799.95
500mm 1000mm combination			129.95
19-35mm F3.5-4.5	149.95	28-80mm F3.5-5.6	79.95
28-105mm Zoom	99.95	28-210mm F3.5-5.6	99.95
28-300mm F4-6.3	169.95	35-105mm Zoom	119.95
70-210mm Zoom	79.95	75-150mm F3.5	49.95
75-300mm F4.5 Macro Zoom Lens			89.95
100-300mm F5.6-6.7	99.95	100-500mm F5.6-8	195.95
600-1200mm F10 Long Zoom Lens			$999.95
650-1300mm F8 Long Zoom Lens			249.95
800-1600mm F10 Long Zoom Lens			$1299.95
1000-4000mm zoom			349.95
1.4X Teleconverter			99.95
2X Teleconverter	29.95	3X Converter	69.95
1.5X Teleconverter	69.95	1.7X Converter	99.95

TAMRON

14mm F2.8	989.99	90mm F2.8	348.95
28mm F2.5	99.99	180mm F3.5	628.95
24mm F2.5	79.95	500mm F8	198.95
11-18mm F4.5-5.6	434.95	17-50mm F2.8	334.94
18-200mm F3.5-6.3	244.95	18-250mm F3.5-6.3	414.95
18-270mm	548.95	19-35mm F3.5-4.5	159.95
20-40mm F2.7-3.5	298.95	24-135mm F3.5-5.6	398.95
28-105mm F2.8	298.95	28-200mm F3.8-5.6	118.95
24-70mm F3.3-5.6	89.95	28-75mm F2.8	348.95
28-80mm F3.5-5.6	68.95	28-300mm F3.8-5.6	294.95
28-300mm F3.8-5.6 VC	584.95	200-400mm F5.6	298.95
55-200mm F4-5.6	128.95	75-300mm F4-5.6	128.95
70-200mm F2.8	664.95	200-500mm F5-6.3	758.95
60mm F2 Macro	498.99	10-24mm F3.5-4.5	458.99
1.4X Converter	124.95	2X Tele Converter	138.95
1.4X SP Converter	178.95	2X SP Converter	208.95

EXTENSION TUBE
Unitube 12mm..... 54.95 25mm..... 74.95

FILTERS
Top Quality screw in optical Glass Filters

19-37mm	19.95	67-82mm	19.95
40-49mm	9.95	86-95mm	59.95
52-62mm	14.95	105-122mm	129.95

Sun Shade Lens Hoods

19-37mm	9.95	67-82mm	19.95
40-49mm	6.95	86-95mm	69.95
52-62mm	9.95	105-122mm	99.95

3 Lens Close-up Macro Lens Sets

19-37mm	29.95	52-62mm	29.95
40-49mm	19.95	67-82mm	39.95

We Offer MORE THAN 10,000 STANDARD & SPECIAL SIZE FILTERS at LOW DISCOUNT PRICES!!!

Heliopan, Hoya, Cambron, Cokin, Sunpak, Tiffen, etc - **CALL**

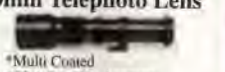
B+W FILTERS
UVaHAZE & KR1 3 Sky B+W and Color

19-58mm	21.95	62mm	25.95
67mm	32.95	72mm	43.95
77mm	49.95	82mm	62.50

B+W CIRCULAR POLARIZERS

37mm-52mm	51.95	67mm	84.95
55&58mm	69.95	72mm	94.95
62mm	74.95	77mm	109.95

Special of the Month
New 500mm Telephoto Lens



*Multi Coated
*F8 Adjustable Aperture
*High Definition
*Tripod Adapter
*Top Rated Lens
*For Most Digital and Film SLR and DSLR Cameras
*And Much More! **Only $99.99**

EXPOSURE LIGHT METERS
Cambron, Gossen, Kenko, Sekonic, Minolta, Pentax, Polaris, Shepard, Soligor, Spectra, Weis, Etc - **CALL**

FLASHES
Canon, Cambron, Elinchrome, Gary Fong, Metz, Minolta, Multiblitz, Nikon, Norman, Novatron, Olympus, Pentax, Photogenic, Quantum, Sigma, Stroboframe, Smithvictor, Sunpak, Sony, Vivitar, Etc **CALL**

PROJECTORS & VIEWERS
Canon, Bruin, Epson, Kodak Carrousel and Ektagraphic, Kaiser, Panasonic, Optoma, Sanyo, Sharp, Telex, Da-Lite Screens, Slide Mounts, Etc **CALL**
Elmo HP-L Overhead Projector 99.95
Large Selection of Projector Lamps Bulbs are In Stock - **CALL**

DARKROOM / ENLARGERS
Beseler, Fujimoto, Durst, LPL, Omega, Etc.
Enlarging Lenses & Darkroom Accessories
Large selection of papers available (Kodak, Ilford, Fuji, Forte, Etc.) **CALL**
35MM/4.5 Wide Angle Beseler Enlargering Lens **69.95**

LARGE & MEDIUM FORMAT
Alpa, Arca Swiss, Bronica, Contax, Fuji, Cambron, Hasselblad, Linhof, Kiev, Mamiya, Rollei, Rolleiflex, Toyo, Wista, Yashica, Etc **CALL**

TRIPODS
Arca Swiss, Bogen, Cambron, Cullman, Berlbach, Giottos, Davis & Sanford, Gitzo, Impact, Linhof, Manfrotto, Slik, Sunpak, Tiltall, Vanguard, Velbon, Etc - **CALL**

FILM (ALL SIZES)
Kodak, Ilford, Fuji, Polaroid, Forte, Etc. **CALL**

PANORAMA
Fuji, Hasselblad XPAN, Horizon, Horseman, Linhof, Noblex, Silvestri, Widelux, Etc. **CALL**

VIDEO
Canon, JVC, Panasonic, Sony, Etc. - **CALL**

CASES
Billingham, Domke, Lowepro, Pelican, Remova, Tamrac, Tenba, Zero Halliburton **CALL**

BINOCULARS
TELESCOPES, RIFLESCOPES, RANGEFINDERS

We offer one of the Largest selections of BINOCULARS, TELESCOPES, RANGEFINDERS AND RIFLESCOPES at LOW DISCOUNT PRICES!!!
We also offer you more than 500 DIFFERENT BINOCULARS!!!!!!! BUSHNELL, BAUSCH&LOMB, CAMBRON, CANON, CARSON, CELESTRON, DOCTER, FUJI, FUJINON, JASON, KOWA,LEITZ, LEICA, LEOPOLD, MEOPTA, MINOLTA, MINOX, OLYMPUS, PENTAX, SAMSUNG, SPALDING, STEINER, SWIFT, TASCO, VANGUARD, VIVITAR, VIXEN, VORTEX, WEENS & PLATH, ZEISS, ETC... CALL

1-800-221-2253 • 1-718-858-5002 • 1-212-675-8600 **email: Sales@CambridgeWorld.com**

The Acratech GP Ballhead

- Weighs less than1 lb (.45kg)
- Solidly holds 25 lbs (11kg).
- Works as a Ballhead, a Gimbal Head and as a Panoramic head.

Made in the USA.

www.acratech.net
(909) 392-7522

Leather Camera Case

FOR YOUR DIGITAL SLR • MADE IN U.S.A.

www.cameraholster.com

Skytop Trading, Estes Park Colorado
Phone: 970 - 577 - 0892

Jim Cline Photo Tours

Machu Picchu Myanmar
India Pushkar Fair
Vietnam Guatemala
Day of the Dead in Oaxaca

Small Group Sizes!

www.JimCline.com (877) 350-1314

DSLR Budget Brackets

Can't mount enough stuff to camera?
- Need lights, monitor, mics, audio?
- Available solutions are *too expensive*?

NEW
DIY101/DIY102
- Tons of mounting points
- CNC milled from solid Al bar stock
- ***superCHEAP !!***

See them at:
jWeedLink.com

Never tried our products? We now offer a STARTER PACK with samples of our most popular products.

PHOTOGRAPHER'S STARTER PACK*
$17.95 PLUS SHIPPING

EASY AS 1-2-3

TURN YOUR PASSION INTO PROFIT!

- Combine your photographs with our superior quality matted greeting card frames to create a marketable product.
- Showcase your photo greeting cards in hundreds of different locations.
- Get 10% off for first-time customers!

PHOTOGRAPHER'S Edge
Your image | our frame | a lasting impression

photographersedge.com
800-550-9254

Photographer's Forum magazine and **SIGMA** present the

31st ANNUAL SPRING PHOTOGRAPHY CONTEST

Over $6,500 in cash and equipment awarded!

FIRST PLACE GRAND PRIZE:
$2,000 cash award from **Photographer's Forum** PLUS Sigma 85mm lens

SECOND PLACE:
$1,000 cash award from **Photographer's Forum** PLUS Sigma 8-16mm lens

THIRD PLACE:
$500 cash award PLUS Manfrotto tripod

FOURTH PLACE:
Five $100 awards

100 HONORABLE MENTIONS:
All Honorable Mentions will be listed in the November 2011 issue of **Photographer's Forum** magazine and will receive a gold embossed certificate of outstanding merit from **Photographer's Forum.**

Visit Photographer's Forum at www.pfmagazine.com

Visit SIGMA at www.sigmaphoto.com

PARTICIPATION GIFT:
2 Free Issues of Photographer's Forum Magazine to all entrants in the U.S. and Canada

- Rights remain with photographer.
- Subject matter is open.
- Finalists notified by Aug. 1, 2011.
- Winners notified by Aug. 15, 2011.

WINNING PHOTOS will be published in the November 2011 issue of **Photographer's Forum Magazine** and exhibited at Brooks Institute Gallery 27. All contest finalists will be published in the book, **Best of Photography 2011.**

Early Entry fee is $3.95 per photo entered (postmarked or uploaded by **April 18, 2011**).

Regular Entry fee is $4.95 per photo entered (postmarked or uploaded by **May 16, 2011**).

ENTER ONLINE at: pfmagazine.com

TO ENTER BY MAIL:
- Enter black & white or color prints or slides. **Do not send disks.**
- Prints must be unmounted 9x12 or smaller.
- Label every photo with your name and address, and indicate which edge is the top.
- Make checks payable to Photographer's Forum.
- All entries must include payment, entry form, and photographs.
- Enclose a self-addressed, stamped envelope for return of work. Work will be returned after 8/19/2011.

Over $240,000 Cash Prizes Awarded Since 1980!

ENTRY FORM

❑ YES! I would like to enter the contest. I am enclosing $3.95 per photo entered (early entry date), or $4.95 per photo entered (final entry date). Please consider my work for publication in future issues of **Photographer's Forum** magazine. Please send me the next two issues of **Photographer's Forum.**

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____ PHONE _____

E-MAIL _____

❑ Check or money order enclosed (U.S. funds only), made payable to Photographer's Forum.

❑ MASTERCARD ❑ VISA EXP. DATE _____

ACCOUNT NO. _____

CARDHOLDER SIGNATURE _____

Send all entries to **Photographer's Forum**, 813 Reddick Street, Dept. Y, Santa Barbara, CA 93103. **Photographer's Forum** reserves the right to publish all contest winners and finalists. Although caution will be exercised with all work, **Photographer's Forum** is not responsible for damage.

Turn Your Used Camera Gear Into Cash!

No Haggling

No Hassles

FREE Shipping

UCB
used camera buyer

www.UsedCameraBuyer.com

866-735-5444 ext. 9

Camera Holster System

Exclusively for your DLSR!

Light-weight, compact holster means you can leave that big heavy camera bag in the car!

Complete 8-part system includes: RigidCase™ Camera Holster (with belt loop), Detachable Lid, Adjustable Shoulder Strap, Camera Retention Strap, Accessory Pouch (for battery, lens cloth, etc.), Lens Case and Filter Wallet (for two filters).

See the Video!
Skytop Trading
970-577-0892
Estes Park CO 80517

www.cameraholster.com

RELIABLE PHOTO, INC.

ONLY $11.95
20x30 or 20x24

From any Digital File or Negative!!!
Color corrected 4x6's only $0.29
Finishes available: matte, glossy, metallic & textured

We can convert your old 8mm to DVD

Digital Prints on Professional Photographic Paper

QTY.	5x7	8x10	11x14	16x20	20x24	20x30	30x40
1	.99	1.99	4.99	10.00	10.90	11.95	49.95
10	.90	1.75	4.75	9.79	10.75	11.75	47.95

Add $8.50 for S&H

5120 Oakton St, Skokie, IL 60077
847-673-1234
Order online! www.reliablephoto.com
reliablephoto@gmail.com

OMNI-BOUNCE

Used by Professionals around the world, to achieve soft natural lighting with most of the popular brand flash units. Ideal for wide angle shots, macro work, portraits and news coverage. Custom mounting with no Velcro required. Specify your strobe when ordering.

Only $19.95 + $2.50 shipping, Visa, MasterCard & AMEX

STO-FEN PRODUCTS
800-538-0730
P.O. Box 7609, Santa Cruz, CA 95061, USA
www.stofen.com

The Last "Can of Air" You'll Ever Have To Buy!

New DataVac® Electric Duster,® the high-performance "green" alternative to throwaway "canned-air" camera/computer dusting products. All-steel, built to last, no condensation... ***Costs less than 5 "cans of air"!***

Call for info: 1-800-822-1602
www.DataVacElectricDuster.com

MADE IN USA

METRO® *Family Owned Since 1939*

Metropolitan Vacuum Cleaner Co., Inc., Suffern, NY 10901

NOT A POD™

FLEXIBLE CAMERA STABILIZER

$24.95

Visit www.not-a-pod.com to purchase

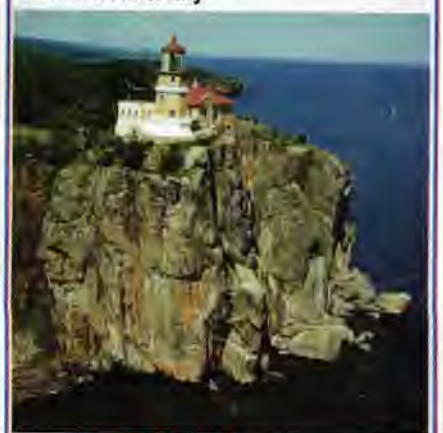
Perfect Posters ● com

Your Headquarters for
LARGE DIGITAL PRINTS

Dye Glossy, Satin, Matte $3.75/sq ft
Archival Pigment Satin $4.80/sq ft
Archival Matte Canvas $9.00/sq ft

File sizes to 200 Megabytes
Any shape or size to 40 x 72"
Blind drop ship directly to your customer
Same Day Shipment available

Consistent Color
Guaranteed Quality

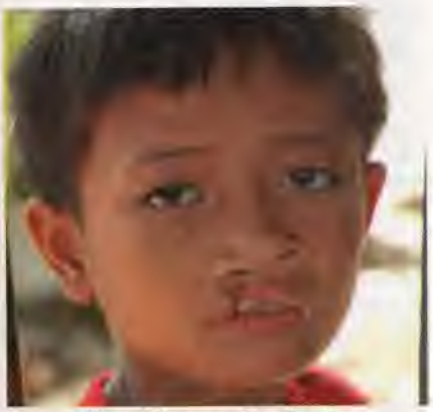


www.PerfectPosters.com
a 100% digital lab

Each Of These Kids Needs Somebody Who Cares Enough To Send $250. Once.

Ming, 6 months, China

Shiva, 1 year, India



Mot, 13 years, Cambodia

Durgap, 5 years, India

Funmi, 8 years, Nigeria

Salazar, 5 years, Philippines

Free cleft surgery which takes as little as 45 minutes and costs as little as $250, can give desperate children not just a new smile — but a new life.

"...one of the most productive charities — dollar for deed — in the world."
—The New York Times

Your support can provide free treatment for poor children with clefts.

❒ $250 Surgery. ❒ $125 Half surgery. ❒ $50 Medications. ❒ $ _____

Mr./Mrs./Ms. _____ Zip _____

Address _____ City _____ State _____

Telephone _____ eMail _____

Credit Card # _____ Expires _____

❒ Visa ❒ MasterCard ❒ AMEX ❒ Discover Signature _____

❒ My check is enclosed. Z11031049ZFJY23

Smile Train, P.O. Box 96211, Washington, DC 20090-6211

Donate online: www.smiletrain.org or call: 1-800-932-9541

SmileTrain
Changing The World One Smile At A Time.

According to the U.S. Government, women should take sufficient levels of folic acid (400 micrograms/day) during pregnancy to help prevent neural tube defects and reduce the risk for cleft lip and palate. When folic acid is taken one month before conception and throughout the first trimester, it has been proven to reduce the risk for neural tube defects by 50 to 70 per cent. Be sure to receive proper prenatal care, quit smoking and drinking alcohol and follow your health care provider's guidelines for foods to avoid during pregnancy. Foods to avoid may include raw or undercooked seafood, beef, pork or poultry; delicatessen meats; fish that contain high levels of mercury; smoked seafood; fish exposed to industrial pollutants; raw shellfish or eggs; soft cheeses; unpasteurized milk; pâté; caffeine; and unwashed vegetables. For more information, visit www.SmileTrain.org. Smile Train is a 501 (c)(3) nonprofit recognized by the IRS, and all donations to Smile Train are tax-deductible in accordance with IRS regulations. © 2011 Smile Train.

▲Smoking Star

New York photographer David Peskin captured one of the stars of film noir, Hazel Brooks, in color, looking as sultry and dangerous as she does in black-and-white. He used a 4x5 Anniversary Speed Graphic fitted with the standard 5¼-inch Kodak Ektar f/4.7 lens plus a CC-95 color filter. Four flashbulbs lit both subject and background. The exposure on Kodak Ektachrome Type B film was 1/50 sec at f/6.3.

60 YEARS AGO

We featured David Douglas Duncan's Korean War photos.

▼New Universal Back

The new Graflok back, introduced by Graflex for Speed Graphics and similar press and view cameras, was one of those quietly revolutionary products that has had far-reaching effects to this day. Designed to replace the standard spring backs, the Graflok back permitted large-camera photographers to use sheet film, packs, and roll film interchangeably and conveniently. Models for 2¼x3¼, 3¼x4¼, and 4x5 cameras were supplied. Though today the Graphic is gone, the Graflok back is still going strong, fitted on press and view cameras.

▶Glorifying the Ziegfeld Girl

Alfred Cheney Johnson, an amateur photographer, seemed an unlikely choice to capture the romantic glamour of the Ziegfeld girls in the post-World War I era when he first started in 1918—but within months of work he proved a master of the gauzy style sought by Florenz Ziegfeld, and became a memorable pro. A major profile of the photographer by Arthur Busch (a *nom de plume* of editor Bruce Downs) took readers back to the 1920s. For this photo of Helen Costello, one of the major stars of the silent screen, Johnson used an 11x14-inch Century Studio camera with glass plates.

▶Before Netflix

In the dark ages before televison and Netflix, movie fans who wanted to see their favorite stars at home had to buy special editions from companies such as Castle Films for home projectors. Both 8mm and 16mm editions were available in lengths from 50 feet to "complete" (full-length) in either silent or sound versions. Prices ranged from $1.75 for an abbreviated 50-foot 8mm edition to $17.50 for a full-length 16mm sound version.

—*Harold Martin*

ADORAMA

THE PHOTOGRAPHY PEOPLE

More Than a Camera Store

The friendliest and most trusted discount imaging store for over 30 years

SHOP RENT SELL PRINT LEARN

VISIT ADORAMA.COM FOR:

1. Huge selection of photo and electronic products
2. New, used and refurbished item selection
3. Your favorite brands
4. Competitive prices
5. **Free same-day shipping** on thousands of items
6. Confidence with our **30 day money-back** guarantee
7. Our how-to articles and buying guides to help you make an informed decision
8. Regularly updated new products and special deals

adorama.com
42 West 18th Street
New York City, 10011

800.223.2500
212.741.0466
info@adorama.com

ADORAMA tv
Watch. Learn. **Create.**
4 shows, new episodes daily (M-Th): **adoramatv.com**

ADORAMA
THE PHOTOGRAPHY PEOPLE
adorama.com
42 West 18th St.
New York City, 10011
800.223.2500

Introducing
The new Adorama entertainment lineup

COBY. VIZIO ViewSonic SAMSUNG TOSHIBA Panasonic SONY LG

TV Accessories

LG

BD590 Blu-ray Disc Player

This is fully loaded with a 250GB Media Library that lets you store your music, photos and HD movies you purchase from Vudu. This is something better than Blu-ray.

$207.95

BOSE

CineMate® GS Series II

Digital Home Theater Speaker System - 2.1 Stereo Audio is the easiest way to bring Bose® performance to your HDTV. An easy-to-use, programmable universal remote controls the system

$1099.95

YAMAHA

YMC700

neoHD wiFi media controller/AV Receiver with Cinema DSP

$499.95

COBY.

TF-TV1091

10.2 inch digital portable wide screen TFT LCD TV with ATSC/NTSC tuner

$120.95

MONSTER

MC 800HD Cable

6.56 ft Advanced HDMI Male to HDMI Male 800hd High Speed HDMI Cable. Supports up-to 1080p Video

CABLES UNLIMITED

Wireless USB to HDMI Adapter

Supports VGA. Adapter with audio capabilities

$149.95

SAME DAY SHIPPING on orders placed till 6:00pm on Mon-Thur, Friday on orders placed till 1:00pm for all in-stock items. **FREE SHIPPING** on thousands of items! Plus, Adorama protects you more than ever with our **30-DAY MONEY BACK** guarantee! Shop with confidence and rest assured. For complete details, call 800.223.2500 or visit adorama.com

BBB ACCREDITED BUSINESS

PANASONIC LUMIX DMC-GH2

CONTINUED FROM PAGE 81

sively sharp, with vibrant colors and few, if any, video artifacts. You also get a wide selection of pixel counts and frame rates that take full advantage of everything the AVCHD codec has to offer. And since the sensor in the GH2 can output 60 interlaced frames per second, you get true 60i capture, unlike the GH1's 24-frame capture, which was then up-converted to 60 frames—a process that sometimes adds video artifacts along the way.

Bottom Line

Between the boost in resolving power, higher top ISO, behind-the-scenes improvements to video capture, and, of course, touch-screen control, the GH2 keeps Panasonic at the forefront of the Micro Four Thirds format and ILCs in general. In almost every area, it tops Samsung's NX10, which remains the only other DSLR-style ILC on the market.

And in terms of robust controls and versatility—though certainly not compact size or attractiveness—it tops the competition from Olympus. (Oly's Pen series is more appropriately compared with Panasonic's rangefinder-style GF2, which we'll be testing soon.)

Given the array of lenses now available for this system from both Panasonic and Olympus, Micro Four Thirds now offers a compelling alternative to DSLRs and advanced compacts when it comes to choosing a camera for vacations, general shooting, and family affairs.

While it will certainly appeal strongly to hobbyists and soccer moms, we also expect that pro shooters might well find it an excellent choice for occasions when they want a smaller and lighter rig. —*Philip Ryan*

ADORAMA
THE PHOTOGRAPHY PEOPLE

42 West 18th St.
New York City, 10011
212.741.0466

800.223.2500
adorama.com
info@adorama.com

New York's best kept secret. The expert's source since 1977!

SLR Digital Cameras

D7000

A high-quality mid-class D-SLR that responds to user demands with a variety of the latest camera technologies and functions for high-quality, high-definition shooting, all in a durable, high-performance, yet compact body. 16.2MP, 1080HD Movie

Nikon

STARTING AT
$1199.95

5D Mark II

Features a huge, full-frame sensor. A 21.1-megapixel CMOS sensor delivers images of up to 5616 x 3744 pixels. It is the first digital EOS to offer recording of Full HD video in Live View Mode. Capable of shooting clips almost half an hour long at full 1080 resolution

Canon

STARTING AT
$2499.99

K5

Go ahead and feed your photography obsession with the PENTAX K-5. For you, capturing that great shot isn't a casual interest. It's a part of your life. One spectacular image after another. This camera is the perfect piece of equipment to help you get your photo fix.

PENTAX

STARTING AT
$1599.95

SLT A55

Change the way you shoot pictures with Sony's new Translucent Mirror Technology. The SLT-A55V features professional-grade continuous shooting at 10 fps and visibly faster, more accurate focus in Live View and HD Movie modes

SONY

STARTING AT
$749.99

Evolt E5

Built on our revolutionary E-System technology, the new Olympus E-5 adds powerful new features that let you do more than ever before. 12.3 Megapixel Digital SLR Camera Body, CF/SD Dual Slot, 3 Inch Swivel LCD

OLYMPUS

STARTING AT
$1699.99

SD-15

Powered by the 14-megapixel Foveon X3 direct image sensor, it can capture all primary RGB colors at each and every pixel location arranged in three layers. The camera adopts the SD card and incorporates a highly visible 3.0" LCD

SIGMA
$989.00

Lenses

Tokina

16-28MM F/2.8 ATX Pro FX

Exclusively for DSLRs, fast internal focusing
$849.95

Kenko

Pro 300 AF Converters

Designed for use with 100mm telephoto or above, best w/200mm

TAMRON

18-270mm f/3.5-6.3 DI-II VC Lens

Ultra-high power zoom.
AFTER REBATE
$479.99

TIFFEN
Digital HT™
Take a virtual reality tour of Digital HT filter effects at tiffen.com
Digital HT™
A Major Breakthrough in Multi-Coated Filter Technology
Tiffen's Digital HT filters are available as:
• Digital Ultra Clear™
• Haze 86 (with 86% UV absorption)
• Circular Polarizer
• 812® Warming Filter
• ND 0.6
• ND 1.2
• Soft/FX® 3
• Star 4 Point 2
• Color-Grad® ND 0.6
In sizes 52mm-82mm with distinctive soft pouch for storage

SIGMA

EF-610 DG Super Flash

Shoe mount flash for DSLRs,
$255.00

85mm f/1.4 EX DG HSM

Especially ideal for portrait photography
$899.00

17-50mm f/2.8 EX DC OS HSM

Auto focus wide angle zoom lens
$669.00

10-20mm f//4-5.6 EX DC HSM

DC Series for DSLRs, hyper sonic motor,
$649.00

17-70mm f/2.8-4.5

DC macro, auto focus, wide angle zoom lens
$449.00

30mm f/1.4 EX DC HSM

The most appropriate coating
$439.00

ADORAMA tv
Watch. Learn. **Create.**
4 shows, new episodes daily (M-Th):
adoramatv.com

Adorama Pix
The source for the finest quality digital prints, photobooks and more:
adoramapix.com

=$ Used & Trade
Paying top dollar for your used equipment, get an instant online quote at:
adorama.com/sell

Learning Center
Video tutorials, how-to's, interviews and reviews for photographers of all levels:
adorama.com/ALC

Promotion

american PHOTO MODEL SHOOT

1 day • beautiful models • build your portfolio

Photographers, come join American Photo magazine for the ultimate model shoot. This unprecedented one day event presents a unique opportunity to learn from professional photographers as you fill your portfolio with beautiful photos. We'll provide the subjects, sets, lighting and guidance. And with many models to photograph, all you need to bring is your camera and your creativity.

These events will sell out, so register today!

MARCH 26 LOS ANGELES

APRIL 16 DALLAS

MAY 14 NEW YORK CITY

FOLLOW US ON f

[American Photo Model Shoot]

Come and try out the new line of **Sigma cameras** and lenses!
All camera brands are welcome.

SIGN UP TODAY!

SIGMA

americanphotomag.com/modelshoot

ADORAMA
THE PHOTOGRAPHY PEOPLE

42 West 18th St.
New York City, 10011
212.741.0466

800.223.2500
adorama.com
info@adorama.com

New York's best kept secret. The expert's source since 1977!

Electronic Viewfinder Digital Cameras

SONY
NEX-5
14.2 Megapixels
Interchangeable Lens
18-55mm F3.5-5.6 OSS
E-mount Lens

Panasonic
Lumix DMC-GH2
16.05 Megapixel
14-140mm Hybrid Lens,
10x Zoom, 3" TFT LCD
with Touch Panel,

SAMSUNG
NX100
AF DSLR Digital
Camera with 20-50mm
Zoom Lens,
14.6 Megapixels

OLYMPUS
PEN E-PL1
12 MP, with 14-42mm
Micro Four Thirds Lens
and 2.7" LCD Display

LEICA
M9
18 MP, 24 x 36 mm
Format Sensor,
Smallest full frame dig.
camera in the world

Real 3D

FUJIFILM
W3
FinePix Still/Video,
Dual 10MP, Dual
Fujinon 3x Lenses,
3.5" Wide VGA LCD

Point & Shoot Digital Cameras

Vivitar
Vivicam 8225
8MP Digital Camera,
SD Card Support,
2X Optical, 8x Digital
Zoom, 2.4" TFT Screen

Rollei
Rolleiflex AF5.0
MiniDigi
5.0 Megapixel,
1.1" LCD Color
Screen

Kodak
EasyShare Z981
14 Megapixel, 26 mm
Wide-Angle Lens,
26x Optical Zoom,
3.0" Display, HD Video,

FUJIFILM
FinePix HS10
10.0 Megapixel,
30x Optical Zoom,
3.0" Tilting LCD,
CMOS Shift/High ISO

CASIO
EX-FH25
High Speed Exilim
10 Megapixel,
20x Optical Zoom,
4x Digital Zoom, 3" LCD

SAMSUNG
TL500
10 Megapixel,
F1.8-F2.4 Schneider-
KREUZNACH Lens,
24mm Wide Zoom

Digital Picture Frames

Kodak
Pulse 10.4"
with 512 MB Internal
Memory, 4:3 Aspect
Ratio, Photo Frame:
11" x 13" x 1.5"

SONY
DPF-XR100
10.2 inch with 16:10
Aspect Ratio LCD, Up
to 4,000 Images, USB
Input, AVCHD/MP4

PANDIGITAL
Panimage
10.1" Digital Photo
Frame - Black & White
Interchangeable Mats

Multimedia Digital Storage

EPSON
Storage & Viewer
with USB 2.0 & 4" LCD
P3000 40 GB
P6000 80 GB
P7000 160 GB

FLASHPOINT
Portable Storage
For Picture & Data
with USB Interface &
Card Reader Available
320GB 500GB

NEXTODI
ND-2700 eXtreme
500GB Portable photo,
video, and data
storage. Supports
multiple memory cards.

Software

Complete Collection

Photoshop Lightroom 3

CS5 Design Premium

DXO TECHNOLOGY datacolor DARKROOM ONE

SAME DAY SHIPPING on orders placed till 6:00pm on Mon-Thur, Friday on orders placed till 1:00pm for all in-stock items. **FREE SHIPPING** on thousands of items! Plus, Adorama protects you more than ever with our **30-DAY MONEY BACK** guarantee! Shop with confidence and rest assured. For complete details, call 800.223.2500 or visit adorama.com

Store Hours
Sunday 9:30am - 5:00pm
Mon-Th 9:00am - 8:00pm
Friday 9:00am - 2:00pm
Saturday Closed

BBB ACCREDITED BUSINESS

ADORAMA
THE PHOTOGRAPHY PEOPLE

adorama.com
42 West 18th St.
New York City, 10011
800.223.2500

Professional Video

XF-305

High Definition Pro Camcorder, CF Card Media, 18x HD L-Series Zoom, HD-SDI Output, Genlock and SMPTE Time Code Terminals. Ideally suited to match the requirements of journalists and film-makers on the go.

Canon
$7499.00
CAXF305

AG-HMC150

The Industry's Next Generation Affordable HD Professional 3-CCD Handheld AVCCAM Camcorder, with a Leica 13x Wide-Angle Optical Zoom, 3.5" LCD Monitor, SD/SDHC Memory Card Slot AVCHD.

Panasonic
$2825.00
PCAGHMC150

HD Camcorders

SONY
NEX-VG10
HD Interchangeable Lens Handycam Camcorder

SAMSUNG
HMX-S16BN
64GB SSD Hi-Def Digital Memory Camcorder with Wi-Fi

Panasonic
HDC-SDT750K
3D Camcorder with Advanced 3MOS System, 1080/60p

Flip
MinoHD
Camcorder with 120 Minutes of Recording Time. 3rd gen.

Video Accessories

STEADICAM
Merlin Stabilizer
Stabilization System for Camcorders And HD DSLR Cameras

Blackmagicdesign
DeckLink Duo
With 2 SDI Inputs and 2 SDI Outputs, Switchable b/t SD /HD

SONY
LMD 9020
9" Professional LCD Multi Format Color Monitor

AZDEN
310LX UHF
On-Camera Bodypack and Plug-in System

bescor
LED-150 12V
On Camera Dimmable LED Video Light w/ Cigarette Plug (bundle)

anton bauer
Dionic HCX
14.4V-120W Lithium-Ion Battery

I·D·X
Endura E-10
98Wh Li-Ion V-Mount Battery Pack, 14.8 Volts/6.6 Ah

ZOOM
Q3HD Handy Video Recorder
2.4 inch Widescreen Color LCD Screen

SAME DAY SHIPPING on orders placed till 6:00pm on Mon-Thur, Friday on orders placed till 1:00pm for all in-stock items. **FREE SHIPPING** on thousands of items! Plus, Adorama protects you more than ever with our **30-DAY MONEY BACK** guarantee! Shop with confidence and rest assured. For complete details, call 800.223.2500 or visit adorama.com

BBB ACCREDITED BUSINESS

SAVE TIME

24/7 Customer service is only a click away!

- Change Your Address
- Check Your Account Status
- Renew, Give a Gift or Pay a Bill
- Replace Missing Issues

Just log on to:

www.popphoto.com/cs

POPULAR PHOTOGRAPHY

ADORAMA
THE PHOTOGRAPHY PEOPLE

42 West 18th St.
New York City, 10011
212.741.0466

800.223.2500
adorama.com
info@adorama.com

New York's best kept secret. The expert's source since 1977!

Film Scanners

plustek

OpticFilm 7600i SE

7200 dpi Film Scanner with Automatic Dust and Scratch Removal

PACIFICIMAGE

PrimeFilm 7250 Pro3

35mm Film Scanner with 7200dpi, USB & Firewire Interface

FLASHPOINT

3-in-1 Slides Scanner

View scanned photos through a digital picture frame.

Flatbed Scanners

EPSON

Perfection V700

Photo Photo Flatbed 4800x9600 dpi, 48 bit, built-in 8"x10" Transparency Unit,

Kodak

P461

Personal Photo Scanner makes it easy to share your favorite photos

Canon

CanoScan 9000F

9600 x 9600 Optical dpi, USB 2.0 Interface

Pro Printers

Up To $500 Rebate when purchasing a printer together with select DSLR cameras

EPSON

Stylus R2880

8 Color 13" Wide Inkjet Color Printer, 5760 x 1440 Optimized dpi with PictBridge

Canon

Pixma Pro 9500 Mark II

4800 x 2400 dpi Resolution for Mac & Windows

hp

Photosmart B8550

Compact 13" x 19" Photo Inkjet Printer for Mac & Windows

Wide Format Printers

EPSON

Stylus Pro 4880

17" Colorburst Inkjet Printer, 2880 x 1440 dpi Resolution, 16-bit Printer Drivers

Canon

imagePROGRAF iPF6100

8" - 24" Paper Width, with Ethernet and USB 2.0 Interface

hp

Z3200 Designjet

24" Compact Color Photo Printer with USB 2.0 Interfaces for Mac & Windows

MP3 Players

Value Added Reseller

iPod Nano

8GB, 6th gen 1.54 inch Multi-Touch LCD Display (In-store only)

SanDisk

Sansa Fuze

MP3 Player, FM Tuner, 2.4" Color 320 x 240 QVGA Screen, Card slot

COBY

MP757-16G

MP3 Video Player with 2.4 inch Display, 16GB Memory, FM and Touch

ADORAMA tv
Watch. Learn. Create.
4 shows, new episodes daily (M-Thr
adoramatv.com

Adorama Pix
The source for the finest quality digital prints, photobooks and more:
adoramapix.com

=$ Used & Trade
Paying top dollar for your used equipment, get an instant online quote at:
adorama.com/sell

Learning Center
Video tutorials, how-to's, interviews and reviews for photographers of all levels
adorama.com/ALC

ADORAMA
THE PHOTOGRAPHY PEOPLE

42 West 18th St.
New York City, 10011
212.741.0466

800.223.2500
adorama.com
info@adorama.com

New York's best kept secret. The expert's source since 1977!

Flashpoint Lighting

FLASHPOINT
$199.95

Budget Studio Flash Kit #1

2- Budget studio flashes
2 - 7" light stands
2 - 33" White umbrellas w/ black cover
1 - Deluxe carrying case
1 - Barndoors for budget & AC slave
1 - Snoot for Budget Flash

FLASHPOINT
$109.95

2-Light Softbox Kit

With fluorescent bulbs, stands and a carrying case. Made for complex lighting scenarios and a soft lighting effect. Photograph large products and showcase all the little details. This is truly a studio or location kit ready for a variety of tasks.

FLASHPOINT
$159.95

3-Light Fluorescent Outfit

Comes with stands, umbrellas, bulbs, a 5.5" reflector and deluxe carrying/storage case. These long-lasting cool lights emit very little heat and can stay on all day long without a problem

FLASHPOINT
STARTING AT
$99.95

AC/DC Monolight

Designed with the latest in high-tech features. The M Series is supplied with an AC cord for out-of-the-box use. Using our DC Power Pack converts the monolight into a portable unit for use anywhere. Available in various watt/sec configurations

FLASHPOINT
$99.95

Cool Light 4 (Kit)

16" reflector w/10'. air cushioned light stand, four 24 Watt fluorescent bulbs, a 480 Watt equivalent, and a **FREE diffuser.** Sepertae switches for each bulb give you maximum control over your light modeling. Comes w/hardware to plug in AC & mount an umbrella

FLASHPOINT
$49.95

Budget Studio Flash 100

This economically-priced AC strobe will allow you to create professional results. 110V unit plugs into standard household socket. Balanced at 5600K, guide no. of 60 at ISO 100 and recycling time ot 4 seconds

CARBON FIBER TRIPODS

by Flashpoint - Exclusively from **adorama.com**

ALL THE FEATURES OF HIGH-PRICED CARBON FIBER TRIPODS
WITHOUT THE HIGH PRICE

Carbon fiber is much stronger than aluminum, yet it is about 30% lighter in weight. It absorbs shock and does not transmit vibrations- ensuring sharper images. Opens and closes with ease, and can be used for ground-level photography. Leg ends are rubber tipped and have retractable spikes for steady shooting everywhere.

Available in a variety of sizes, with flip or twist lock, and as a monopod
Monopods starting at $79.95
Tripods starting at $119.95

FLASHPOINT

Flashpoint Accessories

FLASHPOINT

AC Master Slave

With PC connection, guide number of 90 at ISO 100

$19.95

FLASHPOINT

C-Shaped Adjustable Bracket

w/2 shoes & 2 tripods screws2.0

$11.95

FLASHPOINT

Head Clamp

Clamp with small ball & camera mount socket head

$9.95

FLASHPOINT

Large Spring "A" Clamp

w/ 1-1/8" opening & 5" jaw length

$4.95

FLASHPOINT

Pro Clamp

With reversible mounting stud. 1/4 x 20 and 3/8 screw threads

$16.95

FLASHPOINT

Tilt Adapter

For Nikon lenses to m4/3 camera

$79.95

SAME DAY SHIPPING on orders placed till 6:00pm on Mon-Thur. Friday on orders placed till 1:00pm for all in-stock items. **FREE SHIPPING** on thousands of items! Plus, Adorama protects you more than ever with our **30-DAY MONEY BACK** guarantee! Shop with confidence and rest assured. For complete details, call 800.223.2500 or visit adorama.com

Store Hours

Sunday	9:30am - 5:00pm
Mon-Th	9:00am - 8:00pm
Friday	9:00am - 2:00pm
Saturday	Closed

BBB ACCREDITED BUSINESS

ADORAMA
THE PHOTOGRAPHY PEOPLE

42 West 18th St.
New York City, 10011
212.741.0466

800.223.2500
adorama.com
info@adorama.com

New York's best kept secret. The expert's source since 1977!

Flashpoint Easy-Shoot Solutions

Finger Shooting Glove

Shoot in the cold with your gloves. Unique quick-release will keep the gloves inplace. Slip resistant pad palm helps secure camera in your hands. strap allows you to secure the gloves around your wrist. In three sixes

FLASHPOINT
$19.95

"Q" Series Light Modifier Kit

For shoe-mount strobes, great for on-location photography or work in a small studio. Includes a Beauty Dish Reflector, Snoot, Diffuser Dome, and accessory pack. Each also available for purchase seperately.

FLASHPOINT
$129.95

SSB 20x27" Softbox

With no rods to struggle with or speed rings to align, the SSB Softbox is easy to assemble, just snap the hardware into place. Can be used with digital cameras or camcorders and is great for shotting portraits or still lifes. Also available as a 2-light kit

FLASHPOINT
$39.95

16" x 16" Deshadow Box

Portable still life studio-in-a-bag with 16" x 16" soft light box, halogen lamps, blue background sweep, a custom carrier and camera stand. An easy on-the-go lighting solution

FLASHPOINT
$32.95

5-in-1 Collapsible Disc Reflector

Translucent, white, black silver and gold surfaces. Perfect for reducing contrast, warming skin tones, eliminating shadows or just softening light. Can be held by hand or light stand. Available in three sizes

FLASHPOINT
STARTING AT
$17.95

PZ Octabox

Patented easy set-up and tear down zipper which is easier to assemble & disassemble. All softboxes come with baffle, rescessed front and carry bagAvailable in 36"x36" or 60"x60". Speed ring for attaching to your light sold seperately

FLASHPOINT
STARTING AT
$99.95

Flashpoint Cases

Lighting Outfit Case with Wheels,

The case is fully padded and includes padded partitions that allow you to customize it to your specific needs.

Fits most lighting kits with light stands up to 36" in length.

FLASHPOINT
$99.95

Water Tight Hard Case

with Diced, Cubed Foam Insert, #UW1560 Interior Dimensions: 20-1/4" x 12-1/4" x 6-3/4" Black

Water resistant
Automatic purge valve
Rubber gasket seal in lid
Stainless steel pins

FLASHPOINT
$74.95

CS770 Lighting Kit Case

Made of high-impact corrugated polymer that is covered with foam and rugged Softex™ material. Protexcts your flash heads and other gear.
Internal Dimentions: 38"L x 10"H x 9.75"W

FLASHPOINT
WAS $169.95
$119.95

Joe Farace Reporter Backpack II

Holds digital pro camera with a 100-400mm lens, 9repositionable dividers to hold several lenses, a flash and up to 17" laptop. Made of weather resistant black, Softex™ nylon. Measures 19.5" x 13" x 9.8"

FLASHPOINT
WAS $79.95
$49.95

Flashpoint Accessories

FLASHPOINT
Fluorescent Bulbs

Available in 24W, 30W, 45W, 70W, 85W & 125W. Save with purchase of 4 or more!

FLASHPOINT
Shoe-Mountable LED 112

Video light

$69.95

Flashpoint Tripod Head

FLASHPOINT

Gimbal Head 1N with Quick Release

Named one of Popular Photography's "BEST BUYS 2010," this head is designed for used with very heavy lenses. Seperate locking controls

$239.00

ADORAMA tv
Watch. Learn. **Create.**
4 shows, new episodes daily (M-Th):
adoramatv.com

Adorama Pix
The source for the finest quality digital prints, photobooks and more:
adoramapix.com

Used & Trade
Paying top dollar for your used equipment, get an instant online quote at:
adorama.com/sell

Learning Center
Video tutorials, how-to's, interviews and reviews for photographers of all levels:
adorama.com/ALC

COASTLINE, PIEDRAS BLANCAS
Comforth shot with the same rig and filter setup as used on the opening spread. Exposure, 0.4 sec at f/22, ISO 200.

POPPIES, ANTELOPE VALLEY
Shot when the sun was just high enough to open up the poppies—see text for details. Tripod-mounted Canon EOS 5D with 100mm f/2.8 Canon EF Macro lens; 1/30 sec at f/16, ISO 200.

Shoot wildflowers as a foreground with a wide-angle lens stopped down to f/16 or f/22 for maximum depth of field. It can be challenging to photograph them in wind, so adjust ISO for a higher shutter speed to eliminate movement. Long shutter speeds create more impressionistic images.

Alabama Hills Recreation Area

Going to or returning from Death Valley via *US 395? Don't* miss the spectacular Alabama Hills. Located between the town of Lone Pine and the eastern edge of the Sierras, the area offers amazing rock formations and arches, with Mount Whitney, the highest summit in the lower 48 states, towering above at 14,505 feet.

Most photographed is Mobius Arch, also known as Galen's Arch after the late photographer Galen Rowell. From Lone Pine, drive up Whitney Portal Road and take a right on Movie Flat Road. Drive this dirt road for a few miles until a T-junction; turn right and, almost immediately, pull into the sandy parking lot on the left. Find the improved path to Mobius Arch on the left side of the parking area and follow it for about 10 minutes until you reach the arch.

It's much smaller than you might think—and very popular. The sloping rock on the east of the arch can accommodate only a few photographers at a time, so get there early or explore the area if too many people are already there. This location is best at sunrise with a wide-angle lens, but worth visiting anytime photogenic lenticular clouds are overhead.

Antelope Valley Poppy Reserve

Every wildflower photographer should make the pilgrimage to the Antelope Valley Poppy Reserve, about one hour northeast of Los Angeles near Lancaster off Hwy 138. The fields of orange poppies under the brilliant California sun are breathtaking to behold and justify the effort to get there. The peak bloom usually occurs from the end of March to mid-April.

The challenge? The petals close at night and open up only after the sun warms them: High-contrast midday light, while not the best for photography, is required for poppies. Under clear skies, they'll usually be totally open between 10 and 11 a.m. Most visitors do not get there until then, so arrive after sunrise to find a parking spot and a perfect wide-angle composition before everyone shows up. Don't forget your macro lens—I find my 100mm ideal—for intimate close-ups.

California Coast

Though I love the desert, no trip to California would be complete without the beach. Fortunately for photographers, the storms that hit in winter and spring bring the possibility of an epic sunset shoot by the ocean. Pay particular attention to whether sunbeams periodically

Websites

Get all the details here:

- **DESERT USA WILDFLOWER REPORT**
www.desertusa.com/wildflo/wildupdates.html
- **ANZA-BORREGO DESERT STATE PARK**
www.parks.ca.gov/?page_id=638
- **ANZA-BORREGO WILDFLOWER REPORT**
www.abdnha.org/03flower_main.html
- **CAMPING/RV PARK AT BORREGO**
www.springsatborrego.com/
- **DEATH VALLEY NATIONAL PARK**
www.nps.gov/deva/index.htm
- **LODGING AT STOVEPIPE WELLS**
www.stovepipewells.com/
- **CAMPING/LODGING AT FURNACE CREEK**
www.furnacecreekresort.com/
- **JOSHUA TREE NATIONAL PARK**
www.nps.gov/jotr/index.htm
- **ANTELOPE VALLEY POPPY PRESERVE**
www.parks.ca.gov/?page_id=627
- **SAN ELIJO STATE BEACH**
www.parks.ca.gov/?page_id=662
- **BIG SUR COAST**
www.bigsurcalifornia.org/

break through the clouds in the late afternoon—these holes will allow for a dramatic sunset.

My favorite beachside campground in Southern California is San Elijo State Beach, along the Coast Highway 101 near Cardiff-by-the-Sea. If possible, time your visit to a late-afternoon low tide for shoreline shots. Begin your exposures after a wave washes over the foreground, so that a long exposure records the water moving away from the camera as a silky smooth flow. You may want to use a reverse split-density filter, such as Singh-Ray's 3-stop reverse ND, to balance the exposure of the sunset clouds with the brighter tide pools in the foreground.

Seattle-based Jon Comforth brings decades of sailing and backpacking to his landscape and wildlife photography. Check out his photo trips and workshops at www.comforthimages.com.

ADORAMA
THE PHOTOGRAPHY PEOPLE
adorama.com
42 West 18th St.
New York City, 10011
800.223.2500

Even light with your pop-up flash

Bounce the pop-up flash with Professor Kobré's Lightscoop® to produce natural lighting with these DSLR cameras:
Canon 10D, 20D, 30D, 40D, 50D, 60D, 70D **Canon** Rebel XTi, T2i, 400/450, 500/550, XT, XSi, Xsi, 350, 1000D **Nikon** D40, D40x, D50, D60, D70, D70s, D80, D90, D100, D200, D300, D700, D5000, D3100, D5000; **Olympus** E3, E420, , 620, E520; **Pentax** K-7, K-X, K10D, K20D, K100D, K200D; **Sigma** SD14 series; **Fuji** FinePix Pro S series; **Sony** a200, a250, a300, a330, a380, a500, a550, a700

Light scoop
Just $29.95

David Pogue, New York Times
"Incredible!"

Binoculars

SWAROVSKI
EL Series
10x42 EL, waterproof prism binocular w/6.3° angle of view, in green

ZEISS
FL Victory
10x42 T* waterproof Abbe-Koenig roof prism binocular w/6.3° angle of view, USA

Nikon
Monarch
8x42 waterproof & rubber armoured roof prism binocular, USA

VANGUARD
8.5 x 45 Endeaver ED Series
Waterproof & Fog Proof BaK4 Roof Prism Binocular

Adorama Pix
The source for the finest quality digital prints, photobooks and more:
adoramapix.com

=$ Used & Trade
Paying top dollar for your used equipment, get an instant online quote at:
adorama.com/sell

Learning Center
Video tutorials, how-to's, interviews and reviews for photographers of all levels:
adorama.com/ALC

ADORAMA
THE PHOTOGRAPHY PEOPLE
adorama.com 800.223.2500

Archive Slide Pages

Archival Pages

Exclusive thin backing coupled with high clarity provides excellent resolution when proofing without removing negatives from the preserver. Hanging File System designed specifically for hanging photographic records in standard file drawers or file boxes

Print File
STARTING AT
$6.95

Archive Storage

Storage Boxes

DX-Format 12.3 Megapixel Digital SLR Camera Kit - Refurbished - by Nikon U.S.A. with Nikon 18mm - 55mm f/3.5-5.6G AF-S DX (VR) Vibration Reduction Wide Angle Autofocus (VR) Vibration Reduction Wide Angle Autofocus

FLASHPOINT
STARTING AT
$6.95

We carry a full line of
Professional Photo Albums

Albums & folios, photomounts, presentation boxes, photo laquer, mounting boards, proof albums, memory mates, CD holders and more

RENAISSANCE CAPRI ALBUM Osborn
Flora TAP LEATHER ALBUM DESIGNS

Store Hours
Sunday 9:30am - 5:00pm
Mon-Th 9:00am - 8:00pm
Friday 9:00am - 2:00pm
Saturday Closed

BBB ACCREDITED BUSINESS

of beer. Now, I go back and check my files, back them up to a portable hard drive, sometimes burn DVDs, and delete the ones I don't want. I would say 80% of my files get deleted, and it can take hours. I was recently in Australia for a month, and I shot 6,000 to 7,000 pictures. I brought home only 200.

On the road, I store my images on a laptop and on a LaCie external hard drive, which I keep in a shock-absorbing case. I stash each in separate places—one in my backpack, for example, and the other in my hotel room safe. I travel with about ten 16GB high-speed SanDisk cards, and I keep the images on them until I've filled all ten. Then I reformat and reuse them as needed.

What's the hardest thing about being a wildlife pro?

Getting started. You have to shoot, shoot, and shoot until you've got a good number of stock images. Then you have to market them. You have to be inspired and fascinated by the animals, and obsess about seeing and experiencing them. It's not about equipment. Some people think they get better pictures with expensive equipment, but the logistics of shooting is more important than the camera you're using. You learn animal behavior, how to find and light them, and how to find or create the conditions that produce interesting or photogenic behavior. All these things take time, research, and trial-and-error-type practice.

When I was starting, I was out shooting every free minute I had. If you don't find the process fun, it can be very hard to get established. To make a living, you have to always make something new. You can't get by reproducing what you or others have already done.

Do you have some general tips for shooting wildlife?

The most important thing is to know your subjects. If you observe

GREATER MOUSE-EARED BATS "Dress appropriately if you want to photograph sleeping bats," warns Arndt. "After your flash fires, they begin to urinate on you!" Canon EOS-1Ds Mark III, three off-camera 580 EXII Speedlites, and a 50mm f/2.5 macro lens; 1/250 sec at f/16, ISO 200.

an animal long enough, you can predict its behavior—and that's when good pictures happen. With the kingfishers I've photographed for years, I don't need an infrared flash trigger to catch their dives. By their body language, I know when they will dive, and often I can catch them as they hit or emerge from the water.

It's important to research your subjects, and know something of their lifecycles, behaviors, habitats, and idiosyncrasies. Also, when you travel, don't go alone. Use guides or tour groups who can help you keep safe, and be at the right place at the right time. Make sure the guide or tour group specializes in the animal you're most interested in.

Last, be patient. You have to be okay with the fact that it often takes hours, days, or weeks to get a picture that really means something.

Ingo Arndt, one of Germany's busiest wildlife photographers, has images in publications and museums worldwide. For more, visit www.arndt-photo.de.

ADORAMA
THE PHOTOGRAPHY PEOPLE
adorama.com
42 West 18th St.
New York City, 10011
800.223.2500

FREE SAME DAY SHIPPING
ON ORDERS PLACED BEFORE 6:00 PM EST MON-THU
FRIDAY BEFORE 1:00 PM EST

FREE SHIPPING ON THOUSANDS OF ITEMS
30-DAY MONEY BACK GUARANTEE

Adorama Pix
The source for the finest quality digital prints, photobooks and more:
adoramapix.com

=$ Used & Trade
Paying top dollar for your used equipment, get an instant online quote at:
adorama.com/sell

Learning Center
Video tutorials, how-to's, interviews and reviews for photographers of all levels:
adorama.com/ALC

BACKSTORY

Lady of the Lake

Rodney Smith creates a luxurious dream

RODNEY SMITH, WWW.RODNEYSMITH.COM

FOR ME, photography is all about being outside in the world, and interacting with it—the most important thing is finding the right location. To shoot a book cover for Neiman Marcus, I'd gone down to Buford, SC, and spent a week with a location scout. It wasn't until we passed this cypress grove an hour outside Buford that I said, *This is it.*

After getting a permit, we arrived with the model early the next morning. I'd asked for a little boat, and we'd also picked up the dress: a $17,000 gown from Milan that had to be shipped back the next day. So we had to work fast.

We put her in the boat, and I set up my Hasselblad and 80mm lens on another boat about 15 feet away. I'd picked this spot for the way lighting cast a reflection. The park wanted a ranger there, because there were alligators and snakes. He's in another boat just out of the frame, holding a gun.

Shot for Neiman Marcus, Smith's photo didn't show the armed ranger nearby.

I shot one or two rolls of Kodak Plus-X 120 film—I still shoot film—and half an hour later, we left.

—As told to Lori Fredrickson

For Speed to Get the Shot, Pros Trust SanDisk®

Christian Pondella

SanDisk®

NEW SANDISK EXTREME® PRO™ SDHC™ UHS-I MEMORY CARD

Blazing fast shot-to-shot performance [write speed up to 45 MB/s* (300X)]
New Power Core™ Controller technology increases overall performance and reliability
Extreme reliability with Error Correction Code to improve data integrity during read & write
UHS Speed Class 1** captures fast-action full HD and 3-D video†

POWER CORE CONTROLLER · SD HC I · FULL HD VIDEO · U1 | ☑ WATER PROOF‡ ☑ TEMPERATURE PROOF‡ ☑ SHOCK PROOF‡ ☑ X-RAY PROOF‡

Available in 8 GB††, 16 GB††, 32 GB†† capacities
Learn why more professional photographers trust‡ SanDisk® at sandisk.com

BUY FROM A SanDisk® AUTHORIZED PHOTO RESELLER

* Up to 45 MB/sec (300X) read/write speeds. Based on SanDisk internal testing; performance may be lower depending upon host device. 1 megabyte (MB) = 1 million bytes. X = 150KB/sec.
** UHS Speed Class 1 designates performance option designed to support real-time HD video recording
† SD™, SDHC™, microSD™ and microSDHC™ card formats up to 32 GB only; See www.sandisk.com/proof for additional information.
Full HD video (1920x1080x30fps). HD & 3D video support may vary based upon host device, file size, resolution, compression, bit rate, content, and other factors. See: www.sandisk.com/HD.
†† 1 gigabyte (GB) = 1 billion bytes. Some capacity not available for data storage.
‡ PDN North America survey sponsored by SanDisk (12/2009). See www.sandisk.com/leader for more details.

SanDisk, the SanDisk logo, and SanDisk Extreme are trademarks of SanDisk Corporation, registered in the United States and other countries. The Power Core, Power Core Controller logo and SanDisk Extreme Pro are trademarks of SanDisk Corporation. The microSD, microSDHC, SD and SDHC marks and logos are trademarks of SD-3C LLC. © 2011 SanDisk Corporation. All rights reserved.

Focal length: 270mm (equivalent to 419mm) Exposure: F/6.3 1/640 sec ISO320 WB: Auto Handheld

Focal length: 18mm (equivalent to 28mm)
Exposure: F/5.6 1/1600 sec ISO320
WB: Auto Handheld

15x all-in-one

24% smaller

Reveal more of your digital SLR's potential with the world's lightest, most compact 15x zoom[1]. Featuring fast, precise PZD (Piezo Drive) piezoelectric auto-focus and Tamron VC tri-axial image stabilization for sharpness you can see.

NEW 18-270mm F/3.5–6.3 Di II VC PZD

(Model B008) Di II PZD VC Compatible mounts for Canon, Nikon and Sony[2] DSLRs. Includes flower-shaped lens hood.

[1] For high-zoom-ratio DSLR camera lenses with 15x magnification or as of December 2010 (Source: Tamron)
[2] Sony digital SLR camera bodies only on the camera's image stabilization function. For that reason the VC (Vibration Compensation) image stabilization function is omitted from lenses manufactured with Sony DSLR mount.
[3] This lens is designed for use only with APS-C (sensor) digital SLR cameras.

TAMRON USA Inc.
www.tamron-usa.com

Tamron-Manufacturer of precise and sophisticated optical products for a broad range of industries

TAMRON
New eyes for industry